Healthy Neighborhoods:
Guiding the revitalization of the United Northwest Area Neighborhood using principles of urban design and healthy neighborhoods

An Honors Thesis (LA 404)

By

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ABSTRACT

The purpose of this project is to use principles of healthy neighborhoods and urban design to guide the revitalization plan for the United Northwest Area Neighborhood in Indianapolis, Indiana. The United Northwest Neighborhood is a distressed, predominantly African American neighborhood that lies within the boundaries of 38th Street to the north, Interstate 65 and Martin Luther King Jr. Street to the east, 16th Street to the south, and the White River on the west. The 2.1 square mile neighborhood is the site for a neighborhood urban design framework plan. Following the completion of the urban design framework plan, the Upper Canal, a waterway bisecting the neighborhood, was chosen as the site for a revitalization master plan based around the framework.

According to the World Health Organization, "health" is the combination of the social, physical, and mental well-being of an individual or group. Health is not simply the absence of infirmary. This project focuses on integrating principles of healthy neighborhoods and urban design to revitalize and improve the quality of life in the United Northwest Area Neighborhood. This is accomplished by creating a sustainable, walkable neighborhood that provides connections within the neighborhood as well as connections to the greater Indianapolis area, providing opportunities for physical activity and social connections, revitalizing brownfields, providing healthy eating environments, assuring safety, and reinvesting in the neighborhood.

"HEALTH" IS THE COMBINATION OF THE SOCIAL, PHYSICAL, AND MENTAL WELL-BEING OF AN INDIVIDUAL OR GROUP

Research about the construction and development of distressed neighborhoods provided insight on how the neighborhood in which one lives affects his or her behaviors, choices, and overall health at various stages of life. Case studies of urban design framework plans, sustainable neighborhoods, and active living guidelines provided insight on how to create a healthy neighborhood. Finally, research on sustainable community design and revitalization methods was inter-related with principles of healthy environments to guide the design principles for the United Northwest Area Neighborhood.

ACKNOWLEDGMENTS

This project is dedicated to...

my parents; for all the love and support they've given me the past twenty three years. Without you none of this would have ever been possible.

my brothers; for always putting a smile on my face, even during the most stressful weeks of my life. You three always know how to brighten up my day.

my studio classmates and friends. Without your support, critiques, and memories I would not be the designer or person I am today. I will always cherish the memories we've made and appreciate the projects and classes we got through together.

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Carla and John, my studio professors. Your guidance and encouragement helped me through this semester and pushed me to immerse myself in my creative project and push it to its potential.

HEALTHY NEIGHBORHOODS

GUIDING THE REVITALIZATION OF THE UNITED NORTHWEST AREA NEIGHBORHOOD USING PRINCIPLES OF URBAN DESIGN AND HEALTHY NEIGHBORHOODS

"HEALTH IS THE COMBINATION OF THE SOCIAL, PHYSICAL, AND MENTAL WELL-BEING OF AN INDIVIDUAL OR A GROUP."

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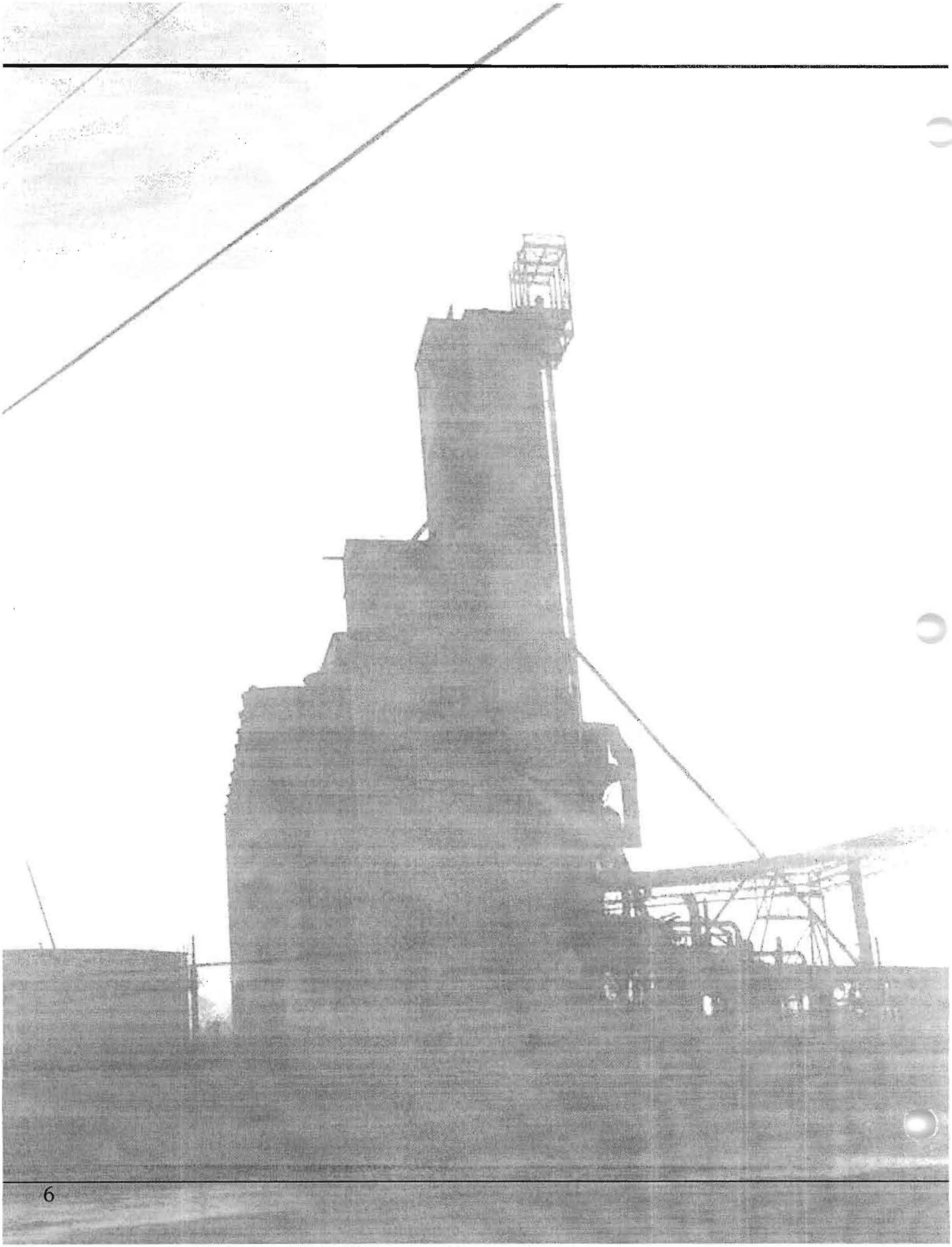


INTRODUCTION

INTRODUCTION

Neighborhoods are an integral part of a person, a community, and an entire city. They are an organic, natural phenomenon developed through human interaction, physical development, political organization, and economic progression (Hallman, 1984). Neighborhoods mean different things to different people and each person develops their idea of what a neighborhood is based on how, where, and when they grew up. It is a physical place—a place with houses, churches and institutions, streets, railroads, and rivers. It is a social community—a stage for interaction, networking, and sharing common interests. It is a place for a population to function—with shelter, facilities, and commercial establishments. Finally, it is a political community—a place of voters, activists and advocates for not only their own, but their community's interests. Neighborhoods can be cultivated and develop or they can be stunted, struggle and deteriorate (Hallman, 1984). It is at the neighborhood level that landscape architects, planners, and policymakers can have a major impact on the sustainability, health, and livability of the city and its residents.

FIG. 1- FAMILIES GATHERED IN UNWA IN THE 1950S

SIGNIFICANCE

The United Northwest Area Neighborhood (UNWA) qualifies as a severely distressed neighborhood as it faces a high poverty rate (27%, compared to 14.4% for the city), a high percentage of female-headed households (27%), and a high percentage of residents without high school degrees (35%). The unemployment rate of the neighborhood is also quite high at 23.7%, and 26.3% of families receive SNAP food stamps.

RESIDENTS OF DISTRESSED NEIGHBORHOODS ARE MORE LIKELY TO EXPERIENCE POORER HEALTH OUTCOMES

Residents of distressed neighborhoods are more likely to experience poorer health outcomes, lower levels of academic achievement, higher crime rates, and a lack of access to healthy food relative to otherwise-comparable people living in more advantaged neighborhoods (Galster, Cutsinger, & Malega, The Social Costs of Concentrated Poverty: Externalities to Neighborhing Households and Property Owners and the Dynamics of Decline, 2007). Research has shown inner-city urban populations also suffer from the same, if not more drastic, health outcomes than those in suburban neighborhoods despite the current research focus on suburban neighborhoods. Inner-city residents are more overweight, less physically active, and suffer from high rates of cardiovascular and heart disease than their suburban counterparts (Lopez & Hynes, 2006)

Many studies have concluded that children are more likely to experience more severe or longer lasting effects of living within distressed communities. (O'Hare & Mather, 2003). UNWA has a large number of children living within the neighborhood—as of 2009, 25% of the population was under the age of 18 (U.S. Census Bureau, 2009).

Since 2007, The City of Indianapolis, Great Indy Neighborhoods Initiative (GINI), Ball State University, and LISC have worked together to create Quality of Life Plans for various distressed Indianapolis neighborhoods. While these plans provide a framework for policy, programs and community initiatives, they lack an urban design element that seeks to alter the urban fabric of the neighborhood to improve health, livability, and sustainability. By combining the knowledge of landscape architecture, urban planning, and urban design healthier communities can be created.

PROBLEM • SUBPROBLEMS

PROBLEM

The purpose of this project is to revitalize the United Northwest Area Neighborhood, a low-income, predominantly African American neighborhood in Indianapolis, Indiana. This project explores how the neighborhood environment affects residents' health, how principles of healthy neighborhoods can address these neighborhood effects, and how these principles can be implemented through urban design to guide revitalization. An analysis of these issues results in a neighborhood urban design framework based around principles of healthy neighborhoods and is followed by a master plan along the Upper Canal, a waterway that bisects the neighborhood, based around the framework.

SUBPROBLEMS

- How has urban development changed over the course of time?
- How are distressed neighborhoods defined and measured?
- What are the mechanisms and effects of neighborhood distress on the health neighborhood residents?
- How can the urban fabric of the neighborhood sustain or exacerbate an unhealthy environment?
- What are human needs and how do these relate to the components of a healthy environment?
- What are historical and current revitalization methods and do they address the health of residents?

FIG. 2- YOUTH CENTER ALONG MARTIN LUTHER KING JR. STREET

HYPOTHESIS • ASSUMPTIONS • DELIMITATIONS

Successful revitalization of the United Northwest Area Neighborhood requires consideration of urban growth patterns, neighborhood effects on overall health and the ways the urban fabric may sustain these effects in order to determine the appropriate needs of the community. Healthy environment and urban design principles can be integrated to increase the quality of life for residents and create a community that fosters upward mobility.

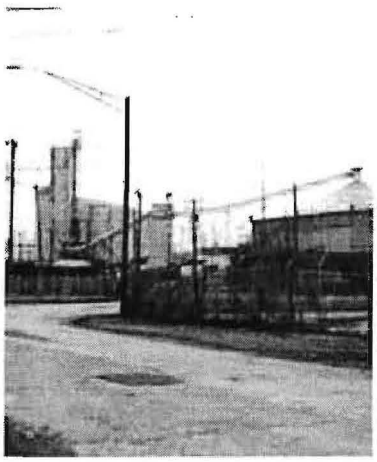
ASSUMPTIONS

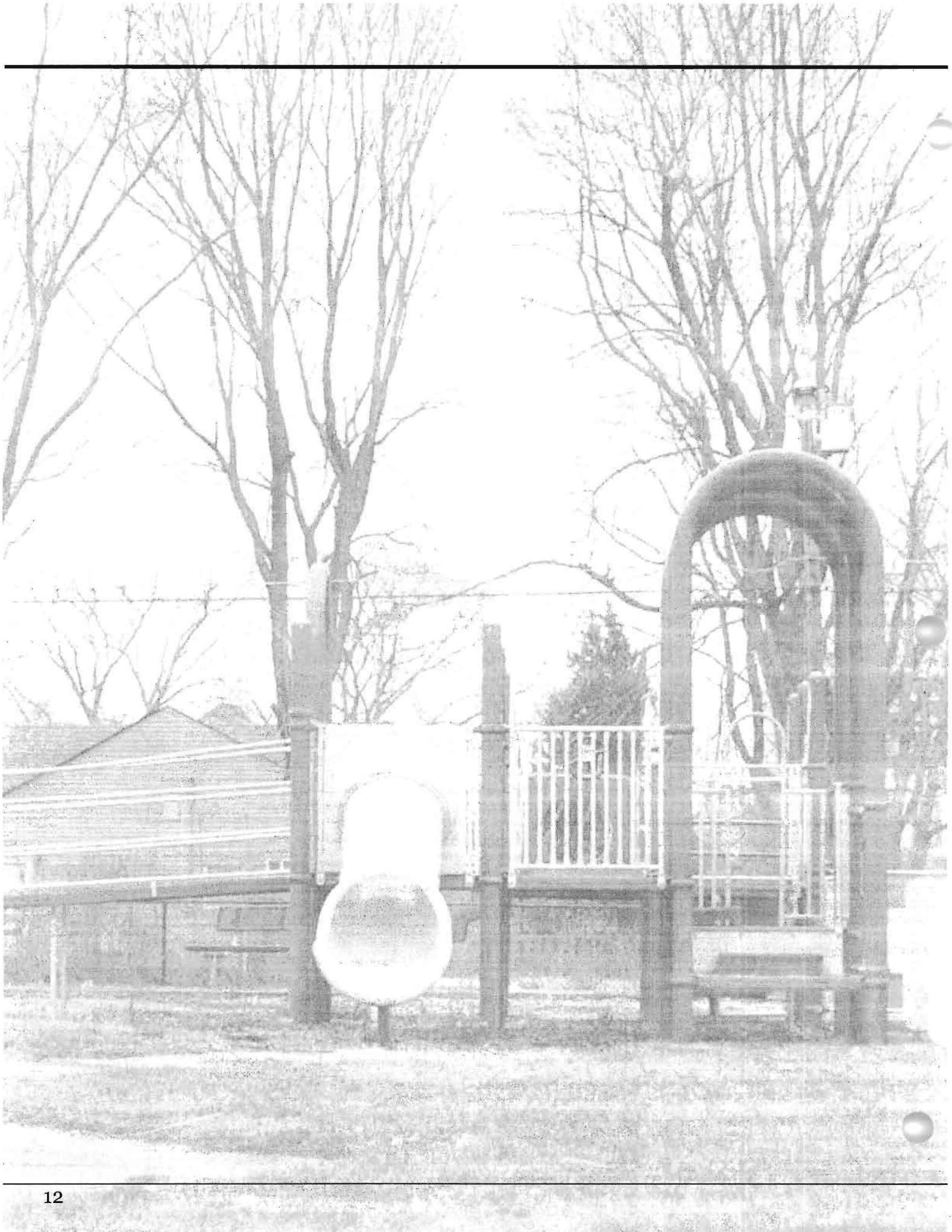
- Zoning variances will be able to beobtained to accommodate affordable housing, mixed use, urban agriculture and all other interventions within the neighborhood
- Public-private partnerships will be formed between community organizations and local businesses
- Programs and policy will be implemented in combination with the urban design framework
- Vacant lots, buildings, and brownfields are available for new development or reuse.

DELIMITATIONS

- This project does not attempt to solve poverty.
- This project does not include provisions for attaining sufficient funding.
- This project does not have the degree of community participation a typical comprehensive community plan would require.

FIG. 3- BROWNFIELD AT BURDSALL AVE.
FIG. 4- BROWNFIELD AT MONTCALM AVE.





LITERATURE REVIEW• RESEARCH

LITERATURE REVIEW

Neighborhoods are an integral part of a person, a community, and an entire city. They are an organic, natural phenomenon developed through human interaction, physical development, political organization, and economic progression (Hallman, 1984). Neighborhoods mean different things to different people—each person develops their idea of what a neighborhood is based on how, where, and when they grew up. It is a physical place—a place with houses, churches and institutions, streets, railroads, and rivers. It is a social community—a stage for interaction, networking, and sharing common interests. It is a place for a population to function—with shelter, facilities, and commercial establishments. Finally, it is a political community—a place of voters, activists and advocates for not only their own, but their community's interests. Neighborhoods can be cultivated and develop or they can be stunted, struggle and deteriorate (Hallman, 1984).

It is at the neighborhood level landscape architects, planners, and policymakers can make a large impact on the sustainability, health, and livability of the city. This literature review will examine urban growth patterns of the United States and Indianapolis and how they created the present conditions within inner-city neighborhoods. The research will then explore distressed neighborhoods, neighborhood effects on the health of residents, and basic human needs. Finally, the literature will review characteristics of healthy neighborhoods and current initiatives to improve the quality of life and health in distressed neighborhoods to guide revitalization.

FIG. 5- HOUSES IN THE UNITED NORTHWEST AREA NEIGHBORHOOD

THE DEVELOPMENT OF THE MODERN AMERICAN CITY

Before the Industrial Revolution, few people lived in cities. However, as industrialization grew, so did American cities. Suburbanization started in the 18th century with industrialization and has continued as technology, demographics, and culture have grown and changed. Farm jobs were replaced by factory jobs, and trains and trams expanded the realm of the city to extend miles beyond a central transportation hub, or what became the central business district (von Hoffman & Felkner, 2002). Rail transportation reached Indianapolis in October, 1847, and by 1855 several railway systems crossed the central Indiana landscape (City of Indianapolis, 2002). The growing rail system eventually led to the nation's first Union Station in the heart of the city, and Indianapolis stood well prepared to serve the uUnion during the Civil War (City of Indianapolis, 2002). Indianapolis eventually emerged as a manufacturing center, capitalizing on farm productivity and meatpacking. Foundries and machine shops were staples in the economy and the city was, at one time, the nation's fourth largest meat pack producer (City of Indianapolis, 2002).

Around the U.S., the rapid growth of industry attracted large numbers of immigrants and rural Americans to cities, including Indianapolis (City of Indianapolis, 2002). This influx, along with increasing birth rates created an 89% population increase within Indianapolis from 1940 to 1970 (City of Indianapolis, 2002). Urban immigrants were poor and the middle and upper-classes saw the urban slums as breeding grounds for disease and crime. Combined with the conditions of the factories, foundries, and, in some cases, slaughterhouses, the city became an 'ugly' place to live and those of higher incomes began migrating out of the inner-city. Cultural factors also lead to the start of suburbanization. During the beginning of the Industrial Revolution, the

FIG. 6- AN AFRICAN AMERICAN FAMILY LIVING IN UNWA
FIG. 7- TOWNHOMES IN UNWA FROM THE 1950'S

environment was considered a thing to be tamed and more Americans began to yearn for their own independently owned home. The 'culture of domesticity' and the idea of the American dream that developed during the Industrial Revolution created tension between the inner city and the bourgeois utopia of the urban edges (von Hoffman & Felkner, 2002). Developers in Indianapolis capitalized on this income outflow by developing affluent suburbs in Woodruff Place and Irvington while railway workers moved to Brightwood or Beech Grove and meat packing workers to Haughville and West Indianapolis (City of Indianapolis, 2002).

Between 1891 and the 1920s the automobile played a major role in the development and identity of Indianapolis. The Indianapolis Motor Speedway opened in 1909 and continues to be a major national pastime. Also, the convergence of the National Road, connecting Indianapolis to the East Coast and the "Dixie Highway," a road rally from Indianapolis to Miami, led to the adoption of the nickname "Crossroads of America" (City of Indianapolis, 2002). While suburbanization started with the Industrial Revolution, the drastic shift towards suburbia gained momentum in the 1950s with the rise of the automobile. The automobile created mobility and land use and growth patterns responded. What started as a plaything for the rich became a necessity for 1 out of every 3 Americans by 1960 (von Hoffman & Felkner, 2002). Americans began moving their homes farther from work, away from the gridded cities to the winding cul-de-sac developments of the urban fringe.

WHAT STARTED AS A PLAYTHING FOR THE RICH BECAME A NECESSITY FOR 1 OUT OF EVERY 3 AMERICANS BY 1960

In Indianapolis, the population increased 58% from 1940 to 1970, and by 1970, deindustrialization and shift from manufacturing to the service industry resulted in the major employment centers being located in suburbia (City of Indianapolis, 2002). Instead of the mixed use, dense, street front development of the 1940s, commercial strips, shopping malls and big box stores were spread throughout suburbia—the signs of 'growth' (City of Indianapolis, 2002). Urban businesses were unable to offer unlimited parking and became more expensive to operate. The shift from urban to suburban resulted in the closing of many downtown retail and commercial developments. Industrial sites developed in a similar fashion—opening new 'industrial parks' farther from the central city, water ways, and other characteristics needed before the technological advances of the twentieth century (City of Indianapolis, 2002).

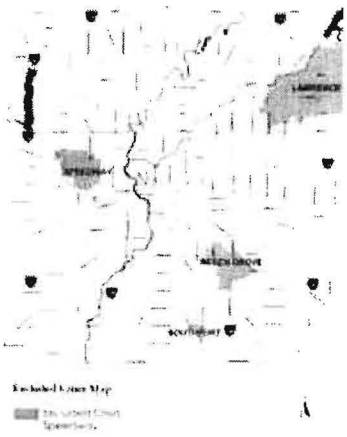
Demographic shifts also led to the boom in suburbanization.

White Europeans who immigrated during the Industrial Revolution began moving out of the city while African Americans and Caucasians from the south began moving in. The migration of populations created middle-class suburbs and inner-city distress—sustained through policy. The Federal Housing Administration, Federal Highway Administration and Veterans Housing Administration developed policies that aggravated and sustained suburban development. The Federal and Veterans Housing Administrations created policies that provided for over 11,000 new mortgages for returning World War II veterans and the Highway Administration provided subsidies for road and highway development (von Hoffman & Felkner, 2002). Local governments also welcomed the new suburban growth and tax base, though it shrunk the tax base within the city itself.

Finally, zoning created single use development focusing on low-density single-family detached housing, and spatial separation. Zoning was also effective in keeping people out of communities, segregating, and attracting particular residential or commercial development (von Hoffman & Felkner, 2002). While planners attempted to cure urban development problems such as health, overcrowding and fire and safety, as well as bring order to the city through the policies—which to some extent occurred—zoning contributed greatly to the automobile-focused communities we have today.

Indianapolis has since struggled with the combination of neighborhood decay and struggling businesses in the city. Early Indianapolis subdivisions were created without adequate necessities for the now common part of the city. The large, older homes were also transformed into multi-family dwellings and many lacked livable kitchen, electrical

FIG. 8-EXCLUDED CITIES MAP, INDIANAPOLIS, INDIANA



and plumbing provisions. While Indianapolis has been in a better physical and economic place than many other large cities because of the adoption of a joint city-county form of government known as UniGov; suburban growth, downtown redevelopment, and neighborhood revitalization have been at the top of local leaders' agendas (City of Indianapolis, 2002).

DISTRESSED NEIGHBORHOODS

This outmigration of higher-income residents and investments has continued throughout the 20th and 21st centuries in both Indianapolis and the United States. It has played a major role in creating distressed inner-city and early suburban neighborhoods in the nation's largest metropolitan areas. While distressed neighborhoods can be both inner-city and suburban, this project is specifically targeted at inner-city neighborhoods. Demographic shifts throughout the twentieth century resulted in the change of inner-city populations to lower-income, predominantly African American residents and employment opportunities left the inner city and early suburbs for the urban fringe. The flight of upper-income residents left the neighborhoods with a dwindling tax base and loss of employment opportunities resulted in vacancy, blight, and urban poverty. In Indianapolis, the majority of inner city neighborhoods and early suburbs have a high concentration of poverty (U.S. Census Bureau, 2009)

Distressed neighborhoods are categorized by high poverty and unemployment rates, have an abundance of vacant or abandoned housing, and provide few job opportunities. They are also characterized by poorer health outcomes, lower levels of academic achievement, and higher crime rates relative to otherwise-comparable people living in more advantaged neighborhoods (Galster, Cutsinger, & Malega, The Social Costs of Concentrated Poverty: Externalities to

Neighborhing Households and Property Owners and the Dynamics of Decline, 2007). These neighborhoods lack quality social, physical, and service environments required to provide a healthy environment for residents.

NEIGHBORHOOD QUALITY AND DISTRESS

Distress can be measured in various ways—demographic characteristics, administrative data sources, survey data on neighborhood perceptions, and trained raters' evaluations of physical and social disorder (Elo, Mykyta, Margolis, & Culhane, 2009) (Kasarda, 1993). Census data is most commonly used because of its availability and comprehensiveness. Using census data, one can determine the socioeconomic status of the neighborhood as well as the race/ethnic composition, family structure, residential stability, and housing conditions (Elo, Mykyta, Margolis, & Culhane, 2009). Administrative information can be used to determine the crime rates, availability of recreational facilities and stores, and assess exposure to environmental hazards (Elo, Mykyta, Margolis, & Culhane, 2009).

POVERTY IS THE GREATEST INDICATOR OF NEIGHBORHOOD DISTRESS

Poverty is the greatest indicator of neighborhood distress and poverty tracts are those with at least 20% of their population falling below the poverty line (Kasarda, 1993). A poverty rate of 25.4% or more, combined with the other indicators would categorize a neighborhood as distressed. The four other indicators of neighborhood distress are measured by disproportionately high rates of unemployment (34 percent or more), female-headed households (37.1 percent or more), teenage school dropout (23 percent or more), and welfare receipt (O'Hare & Mather, 2003). Kasarda noted the difference between distressed and severely distressed neighborhoods is distinguished by the high rate of high school dropouts.

MECHANISMS THROUGH WHICH NEIGHBORHOODS AFFECT RESIDENTS

The neighborhood environment affects residents through various mechanisms. Many sociologists, epidemiologists, planners, and other professionals have studied and categorized these mechanisms in various ways. This literature review will categorize them as social, service, or physical. These mechanisms affect neighborhood residents in many ways, however, according to Galster; their influence is related to their 'dosage' or the degree to which residents are exposed to the influences and their quality of life. Unfortunately, because they are all highly correlated the specific and direct effects are almost impossible to differentiate (Ellen & Turner, 1997).

SOCIAL MECHANISMS

Social mechanisms refer to the various social processes endogenous to neighborhoods including social networks, cohesion and control that relate to the neighborhood resident's behaviors. These mechanisms include the socialization by adults, or the way in which children and adolescents learn about 'acceptable' or 'normal' behavior from adults in the community. When children and teenagers grow up in neighborhoods with working adults, they develop the ability to manage time and plan ahead. However, the opposite may occur in distressed neighborhoods where there is a high rate of unemployment. (Ellen & Turner, 1997; Cubbin, Pedregon, Egerter, & Braveman, 2008). Ellen and Turner conclude that neighborhoods have a significant impact on a youth's choice of peer groups and those influences and social networks can influence their behavior in school and involvement in crime and other dangerous behaviors. Adult social networks and community cohesion has been shown to influence resident's levels of civic and political participation. Residents in neighborhoods with strong social networks are more likely to find employment and are more likely to have references to vouch for reliability and character to employers (Ellen & Turner, 1997). Living among non-employed neighbors reduces other's ability to hear information about job openings and may stunt the growth of social networks (Galster, Cutsinger, & Malega, The Social Costs of Concentrated Poverty: Externalities to Neighborhing Households and Property Owners and the Dynamics of Decline, 2007).

According to Galster, Cutsinger, and Malega, heightened exposure to crime and violence as experienced in distressed neighborhoods leads to a variety of physical and mental health issues as well as poorer educational attainment (Galster, Cutsinger, & Malega, The Social Costs of Concentrated Poverty: Externalities to Neighborhing

Households and Property Owners and the Dynamics of Decline, 2007). Research has shown that women who live in 'safer' neighborhoods are more likely to walk to their various neighborhood destinations than those living in crime-ridden neighborhoods. While witnessing crime may result in emotional trauma, growing up around crime and violence may result in the understanding that violent behavior is 'normal' and 'acceptable' (Ellen & Turner, 1997). Finally, those living in high crime areas may live more isolated lives, restricting their social networks, hindering the social cohesion of the neighborhood, and denying themselves the potential benefits from social networks and pooling community resources (Ellen & Turner, 1997).

SERVICE MECHANISMS

Service mechanisms involve both the presence of services and institutions as well as the public stigmatization by the surrounding context (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010). Vacant or distressed housing, reputations, history and crime lead to stigmatization of a community (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010). Distressed neighborhoods have fewer private, non-profit, or public institutions and organizations that help residents improve their quality of life (Galster, Cutsinger, & Malega, The Social Costs of Concentrated Poverty: Externalities to Neighborhing Households and Property Owners and the Dynamics of Decline, 2007) Ellen and Turner point out that distressed neighborhoods that do have these services typically have reduced and less experienced staffs and are less likely to receive help from volunteers and the rest of the community. The lack of or poor quality of institutional resources can result in poor education, specifically a lack of reading and math resources. The lack of preschools or child care also affects the educational attainment of children and job opportunities of adults in distressed communities (Ellen & Turner, 1997). Access to medical care may result in a lack of treatment for chronic diseases that have been expedited and sustained by the poor physical environment. The lack of afterschool programs, specifically those geared towards sports, music, or art, may result in adolescents increased involvement in crime and violence because they do not have the opportunity to discover individual talents and strengths (Ellen & Turner, 1997).

PHYSICAL MECHANISMS

Physical mechanisms can be both built and natural environmental mechanisms that may or may not directly affect resident's behaviors but have an effect on the physical or mental health of the neighborhood including the condition

of physical surroundings, vacancies, land use issues, and exposure to certain environmental hazards. (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010). Physical mechanisms can also be geographic mechanisms, or those mechanisms that do not arise within the neighborhood but are present because of geographic location and outside forces. These include spatial mismatch or inaccessibility to job opportunities by lack of connections or a lack of jobs in the appropriate industry for the population and a lack of public services (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010).

The condition of physical surroundings affects the health, well-being and choices of families living in distressed neighborhoods. Decaying physical surroundings may evoke a sense of powerlessness for residents, and blight welcomes crime and vandalism, evoking a sense of fear in residents, preventing them from participating in activities outside their homes (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010; Lopez & Hynes, 2006). The "broken window syndrome" isolates residents, reduces trust in their neighbors, and creates safety hazards—discouraging walking. Vacant land may become overgrown by weeds, creating an eyesore for the neighborhood and may eventually welcome illegal dumping, creating another environmental hazard for residents while abandoned buildings reduce density and increase crime (Lopez & Hynes, 2006)

The physical environment can also limit choices and resources available to residents in order to have healthy lives. The lack of sidewalks, parks, playgrounds, and lighting can also have a hazardous effect on the health of a neighborhood (Cubbin, Pedregon, Egerter, & Braveman, 2008). Low-income families are twice as likely to walk as people of other income groups, yet when sidewalks are unusable or simply absent, they are forced to rely on automobiles or stay inside their homes (Murakami & Young, 1997). Research has shown that people who live close to parks are more likely to utilize them, especially inner-city youth whose only arena for physical activity may be in the public park. However, it is not only the presence of public parks, but also their quality that is important and because of shrinking park budgets and the lack of investment in lower-income inner-city neighborhoods, many parks end up unusable due to decay. Trees may also improve the chances of physical activity and socialization. A study from Chicago

LOW-INCOME FAMILIES ARE TWICE AS LIKELY TO WALK AS PEOPLE OF OTHER INCOME GROUPS

CHILDREN TEND TO PLAY IN HIGHLY VEGETATED AREAS MORE THAN NON-VEGETATED AREAS

showed that people were more likely to gather in a space with trees than without, and children tended to play in highly vegetated areas more than non-vegetated areas (Lopez & Hynes, 2006). The presence of streetlights and traffic calming measures also offers the opportunity for physical activity for residents (Lopez & Hynes, 2006).

Low-income, inner-city communities are more likely to be near toxic dumping grounds as well as have numerous brownfields as industrial developments have moved toward the urban fringe. Brownfield redevelopment can help bring investment and jobs back into the community and at the same time, improve the 'tooth-gapped' urban fabric. A lack of investment in the community leads to job losses and longer commutes—increasing the reliance on the automobile (Lopez & Hynes, 2006). According to Ellen and Turner, housing policy discriminates against lower-income families and therefore forces them to live in more urban, inner-city neighborhoods where there is a lack of job opportunities instead of the suburbs where jobs are growing. Low-income families are less likely to have a car and more likely to rely on public transportation than middle and higher income families, making spatial mismatch an even bigger issue (Daily Travel).

This lack of investment not only causes a lack of jobs and employment, but also leads to food insecurity. Distressed neighborhoods are less likely to have supermarkets than upper and middle-income neighborhoods, thus preventing access to healthy food (Vallianatos, Shaffer, & Gottlieb, 2002; Lopez & Hynes, 2006). Stores located within distressed neighborhoods tend to be ethnic groceries, specialty stores, or corner markets that do not carry fresh fruits and vegetables and if they do, many times they are not at affordable prices. The lack of supermarkets and healthy foods forces residents to rely on public transportation or personal vehicles to travel outside the neighborhood to find affordable healthy food. Creating healthy eating environments in the neighborhood can reduce travel time of food, provide affordable healthy food and put money back into the local economy.

As Galster and other researchers have mentioned, residents are affected by all mechanisms—social, service, and physical—at varying degrees. Each neighborhood, with its own specific degree of distress, also has its own set of mechanisms that must be solved to improve the health of the neighborhood.

Regardless of age, income, or race, there are basic needs innate in all human beings. A healthy neighborhood provides an environment in which its residents' basic human needs are fulfilled. Psychologies Abraham Maslow first developed his hierarchy for human needs between 1943 and 1954 and his theory has been widely published since. According to Maslow, we have two basic groupings of needs—deficiency needs and growth needs.

HIERARCHY OF HUMAN NEEDS

A HEALTHY NEIGHBORHOOD PROVIDES AN ENVIRONMENT IN WHICH ITS RESIDENTS' BASIC HUMAN NEEDS ARE FULFILLED.

Deficiency needs are basic needs that must be met before we can act unselfishly. In essence we must fulfill these needs to be healthy. Deficiency needs are physiological, safety, love and belongingness, and esteem. Physiological needs are the most basic needs for survival—food, air, water, and sleep. We must have these needs fulfilled or we may feel uncomfortable and unhappy. Once these needs are fulfilled we then think about other things such as safety needs. These are the needs we have to be stable and consistent (Huitt, 2007). For example, one may not walk around their neighborhood because they do not feel safe; they stay inside or drive their car because that fulfills their need to feel safe. The next level in his hierarchy is the need for belongingness and love—the need to feel accepted and affiliated with others (Huitt, 2007). Humans are social beings—hence why we join clubs, work groups, religious groups. The neighborhood environment then must provide those environments, services, and institutions that provide social outlets. Finally, the last category in deficiency needs is the need for esteem and recognition. As humans we yearn for both the self-esteem that comes from competence and the recognition that comes from others (Huitt, 2007).

Only once these basic needs are fulfilled can we act on our growth needs. These include our need to know and

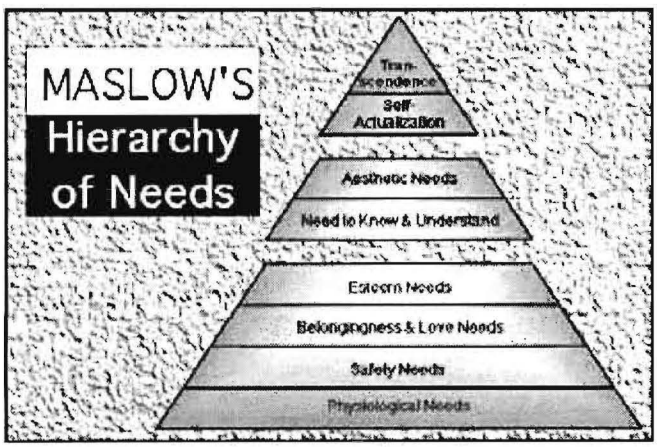


FIG. 9- MASLOW'S HIERARCHY OF NEEDS

understand, our need for symmetry and beauty, our need to find self-fulfillment and to connect with something beyond ourselves. Once one fulfills these needs of growth and self-actualization they have reached the point where they can act unselfishly and strive to act on something beyond themselves (Huitt, 2007).

While these needs are explained in terms of transcendence and order, the dominant need is constantly shifting. For example, a painter may be overcome by the self-actualization of painting, but becomes tired and hungry and then must fulfill those needs. Also, some behaviors may combine various needs such as social or psychological (Huitt, 2007). Essentially, this hierarchy of human needs explains human motivation. If a neighborhood resident lacks a social space in the neighborhood, they will go outside the neighborhood to find it just like if the neighborhood is a food desert—food being a basic physiological need—they will be motivated to find it somewhere outside the neighborhood. Essentially, a successful, healthy neighborhood will provide the spaces, services, and events for residents to fulfill their basic human needs.

REVITALIZATION INITIATIVES IN INDIANAPOLIS AND THE US

Traditionally neighborhood revitalization is often considered through two lenses—place-based and people-based. Initiatives that focus on aspects of neighborhoods such as infrastructure, jobs, services, and housing are considered place-based revitalization strategies. Initiatives that focus on overcoming neighborhood isolation and creating connections to communities that have healthy environments are considered people-based initiatives (Pastor & Turner, 2010).

Place-based housing-focused strategies are typically geared to expanding access to affordable housing options for low-income residents and tend to be federally funded. Proponents typically cite this improves the quality of life for residents and revitalizes the neighborhood while opponents argue that these developments increase the spatial concentration of poverty. Also, because these developments are often done without investment in a comprehensive framework of services and institutions, the neighborhoods typically become more distressed (Pastor & Turner, 2010). Urban renewal, model cities, and the Community Development Block Grant program are all examples of federal job-focused strategies. While these programs have their successes on a larger scale, in most cases they are not targeted toward a specific neighborhood

and some evidence suggest that those strategies that do target a specific neighborhood actually limit the extent to which the strategy can improve the area. Instead, job and economically-based strategies are more effective at a regional scale (Pastor & Turner, 2010)

Because children have been shown to experience more severe and longer-lasting effects of place-based strategies, many distressed neighborhoods gear their revitalization efforts toward programs and services for neighborhood youth and children (Pastor & Turner, 2010). One example is the Harlem Children's Zone which focused its efforts on the neighborhood charter school and student learning. However, while the program is innovative and has been shown to decrease the gaps in children's education, the replicability of this program is not known (Pastor & Turner, 2010).

Finally, the last category of place-based approaches is comprehensive community change strategies. Many neighborhoods have attempted to create a comprehensive strategy that encompasses housing, jobs and children as well as other problems identified by the community members themselves (Pastor & Turner, 2010). This strategy is neighborhood driven, but also uses the experience and knowledge of advocates and practitioners. Comprehensive strategies rely on the idea that neighborhoods can act as incubators for residents, offering services, social networks, opportunities, and support for lower-income families need. This strategy can better address the multitude of issues distressed communities face such as discrimination in employment opportunities and housing and disparities in the neighborhood school environments (Pastor & Turner, 2010).

The City of Indianapolis and the Local Initiative Support Corporation (LISC), through the Great Indy Neighborhoods Initiative (GINI) have worked together to create Quality of Life plans for Indianapolis neighborhoods—a comprehensive community strategy. Currently there are six neighborhoods in Indianapolis that have completed their Quality of Life plans and numerous other neighborhoods are in the process of developing their own. GINI has developed their own set of Healthy Neighborhood Principles and they fall into four categories—Civic, Social, Physical, or Economic (Local Initiative Support Corporation, 2011). These principles include leadership, vision, collaborations, services, education, culture, safety, environment, housing, business diversity, and economy. All Quality of Life plans are neighborhood-driven and because they are developed in cooperation with the

GINI'S HEALTHY NEIGHBORHOOD PRINCIPLES FALL INTO FOUR CATEGORIES—CIVIC, SOCIAL, PHYSICAL, OR ECONOMIC

City of Indianapolis they are eventually adopted as policy documents (Local Initiative Support Corporation, 2011). However, these plans lack a quality urban design element and focus solely on policy and programs. While this does improve the quality of life for the neighborhood, it does not provide a long term vision for the overall environment of the neighborhood.

People-based strategies come in two forms—assisted housing mobility strategies and inclusive housing development strategies. Assisted housing mobility strategies attempt to improve the lives of low-income families by providing them with vouchers that allow them to move into more affluent, stable communities (Pastor & Turner, 2010). This strategy aims at de-concentrate poverty and place low-income familiestoin more opportunity rich environments. Inclusive housing development strategies attempt to require the inclusions of affordable housing through zoning and land use regulations (Pastor & Turner, 2010).

LOOK AT STRATEGIES THAT CONNECT LOW-NCOME RESIDENTS TO THE GREATER CONTEXT

Many times these approaches are contrasted with one another. However, Pastor and Turner suggest that the two strategies are not in conflict and should be integrated together to form a place-conscious approach to revitalization. These strategies would forgo the traditions of looking solely inward or outward for solutions and initiatives and instead look at strategies that improve the neighborhood and regional conditions, open access to opportunities and strive to connect low-income residents to the greater context (Pastor & Turner, 2010). However, while these strategies begin approaching a comprehensive framework for distressed neighborhood revitalization, because they are solely focused on policy they lack the planning and design element that would create a more comprehensive vision for the neighborhood.

As revitalization initiatives have progressed, many organizations are calling for alternate strategies that aim at creating a healthy environment that will then result in healthy, sustainable communities. The Centers for Disease Control, American Society of Landscape Architects, American Planning Association, American Institute of Architects, and the Congress for New Urbanism have all developed strategies for creating and designing healthy neighborhoods. Two of the most prevalent movements are Smart Growth and LEED ND.

According to Smart Growth America, Smart Growth is a design approach that focuses on creating urban, suburban, and rural communities that creating housing and transportation choices near jobs and business and education opportunities. Smart growth focuses on housing, business, economic prosperity, transportation, environment, healthy communities and people, and revitalization (Smart Growth America, 2010). Because these strategies reuse already-developed land and repair existing infrastructure they spark revitalization in distressed neighborhoods (Smart Growth America, 2010).

LEED for Neighborhood Development was created to integrate the principles of smart growth, urbanism and green building into a comprehensive framework and rating system that can be used to guide neighborhood development. LEED ND protects the environment and enhances the overall health and quality of life of the community. It also promotes the design of pedestrian focused neighborhoods, lessening the dependence on the car (U.S. Green Building Council, 2011). LEED neighborhoods have been shown to create several health benefits for residents including reducing the risk of obesity, heart disease, and hypertension. This is done by providing the opportunities for physical activity by promoting walking, density, building residences and businesses closer together, creating complete streets, and providing quality open spaces close to work and home. It also reduces the risk of asthma and respiratory disease by encourage the use of public transit and creating a bicycle network. Encouraging community participation and provide complete streets and quality open spaces also increases social connections and networks. Finally, healthier diets are encouraged by promoting local food production, urban agriculture, and farmer's markets (Centers for Disease Control).

CASE STUDIES • NEW YORK ACTIVE LIVING DESIGN GUIDELINES

While urban design framework plans were easy to locate, ones aimed directly at creating a healthy environment were not. These guidelines, however, gave a clear picture of how the urban environment can be designed to promote a healthy lifestyle and provide opportunities for physical activity. While these guidelines were on a much larger scale than this project, they provided an understanding of how the built environment affects health and how guidelines can be written generally to promote healthy design.

The one critique of this case study was that it focused solely on physical health instead of creating a comprehensive set of guidelines that also included social, mental, and economic health. These guidelines did, however, provide a comprehensive background on how the urban environment affects health and why urban design is key in creating sustainable neighborhoods.

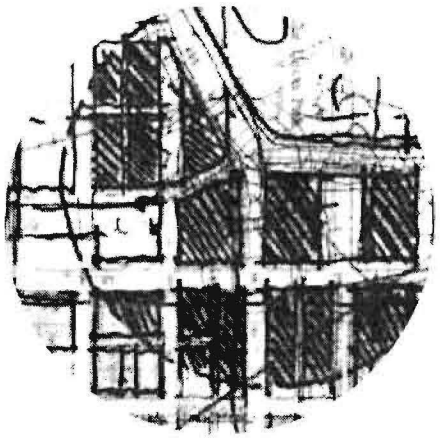
FIG. 10-12
IMAGES FROM THE ACTIVE DESIGN GUIDELINES

CASE STUDIES • SOUTH LAKE UNION URBAN DESIGN GUIDELINES

This framework, for Seattle South Lake Union Neighborhood, was developed in order to create a 'thriving, sustainable, and diverse urban center." These guidelines seek to create a vibrant, urban neighborhood with access to transit, a variety of open space, connections within the neighborhood and to the surrounding context, and a thriving local economy (City of Seattle Department of Planning and Development, 2010).

The framework is structured in twelve sections ranging from street character to public space network. Ihe guidelines conclude with a framework work plan that sets a timeline, work schedule, and directives for implementing the framework plan (City of Seattle Department of Planning and Development, 2010).

These guidelines served as a starting point for the UNWA framework as it gave a basic structure for the UNWA framework to follow. These guidelines also helped to understand how these specific elements--gateways, streets, urban form, etc.--shape and form the identity and character of the neighborhood and how guidelines can be written to direct development.



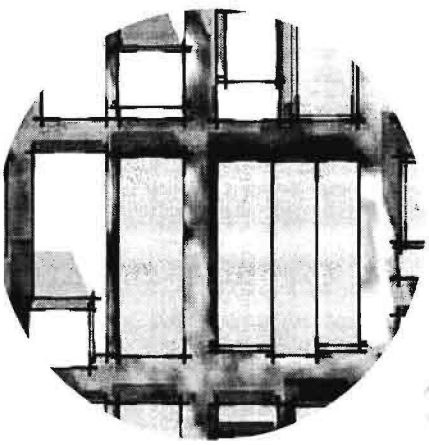


FIG. 13-15
IMAGES FROM THE SEATTLE SOUTH LAKE UNION URBAN DESIGN GUIDELINES

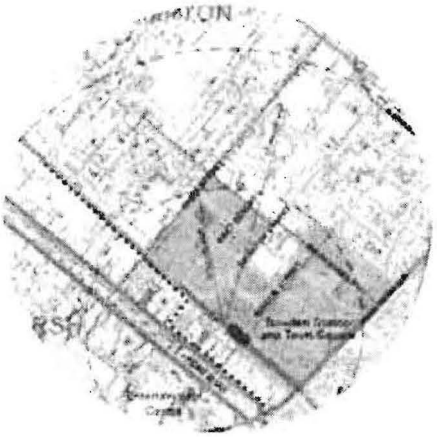
CASE STUDIES • BOWDEN NEIGHBORHOOD URBAN DESIGN GUIDELINES

This urban design framework plan for the Bowden East Precinct of Adelaide Australia will direct development and design for the neighborhood for years to come. The guidelines are geared at promoting healthy, sustainable city-fringe living, which contrasts this project as it focuses on an inner-city neighborhood (Bowden, Australia, 2011).

These guidelines will serve as a manual for designer and developers and are geared to promote architectural diversity, quality design, and public open space networks. They provide a guide to designing a neighborhood where residents can live, work, and play (Bowden, Australia, 2011).

The guidelines are structured around a master plan which provides the context for the design framework. Finally there are precinct-wide guidelines that direct early and mature stages of development, design block arrangements and building typologies, direct landscape design, and has sustainability guidelines (Bowden, Australia, 2011).

These guidelines were used to understand how a places identity and character must be incorporated in order to create a successful framework as well as the ways in which building typology and design, massing, and materials have an effect on the sense of place within the neighborhood.



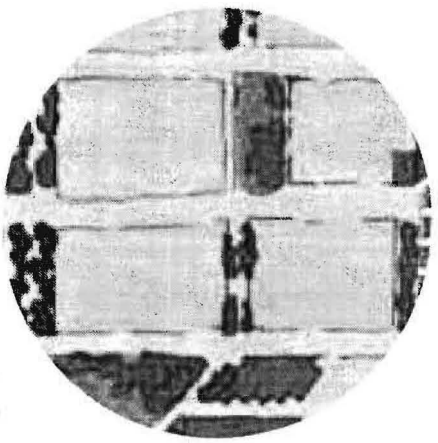


FIG. 16-18
IMAGES FROM THE BOWDEN, ADELAIDE, AUSTRALIA URBAN DESIGN GUIDELINES

FOCUS AREA PRECEDENTS• CANALS AND RIVERWALKS

INDIANAPOLIS DOWNTOWN CANAL
SASAKI ASSOCIATES
INDIANAPOLIS, IN

The Indianapolis Canal was designed by Sasaki Associates. The canal is an ideal place for downtown living, with multi-family dwelling units lining the corridor. The site is also home to the Indiana State Museum, the Ohio Street and Vermont Street plazas, and multiple memorials. While criticized for a lack of retail space, the canal functions well as a pedestrian destination and residential zone.

SAN ANTONIO RIVERWALK

SAN ANTONIO, TX

The San Antonio Riverwalk is the key riverwalk precedent for any city looking to create the same destination and corridor through their downtowns. This corridor offers a variety of destinations from restaurants to parks and offers the opportunity for experience the canal by foot, bike, car, or boat.

FORT LAUDERDALE RIVERWALK
EDSA
FORT LAUDERDALE, FL

The Fort Lauderdale Riverwalk, also contrasting the predominantly residential Indianapolis Downtown Canal, has an abundance of restaurants, retail establishments, public open space, and civic centers as opposed. This riverfront is an important pedestrian destination for Fort Lauderdale.

FIG. 19- INDIANAPOLIS DOWNTOWN CANAL
FIG. 20- SAN ANTONIO RIVERWALK
FIG. 21- FORT LAUDERDALE RIVERWALK

FOCUS AREA PRECEDENTS• PEDESTRIAN BRDIGES

BP SERPENTINE BRIDGE
FRANK GEHRY
CHICAGO, IL

Spanning 925 feet, Gehry's BP Bridge was designed to be both functional and aesthetic. It not only creates an acoustic barrier for the traffic noise and functions as a pedestrian bridge but it also acts as a focal point and key feature for Millennium Park. The bridge is clad in stainless steel panels which makes it compliment that Pritzker Pavilion and provides dynamic views of the downtown Chicago skyline. The bridge is also accessible for those with disabilities, making it a thoroughfare for all (City of Chicago, 2010)

PASSERELLE MIMRAM
MARC MIMRAM
STRASBOURG, GERMANY/ FRANCE

The Passarelle Mimram spans over 600 feet across the Rhine River and is the focal point of the "Jardin des Deus Rives" or "Garden of the Two Banks." It serves pedestrians and cyclists and is accessible for those with disabilities as well. The bridge was built in 2004 and offers great views of down the Rhine River and across the banks of Germany and France (Groundspeak, Inc., 2012)

SIMONE DE BEAUVOIR FOOTBRIDGE
DIETMAR FEICHTINGER ARCHITECTS
PARIS, FRANCE

Designed for a competition in 1998, the Simone de Beauvoir Footbridge spans 190m, crossing the Siene River. The bridge links the National Library plaza with Bercy Park. The bridge combines an arch and catenary and creates a symmetrical 'lens' across the river. This shape adds to its value as a focal point along the Siene (Dietmar Fiechtinger Architectes, 1998).

FIG.22- BP BRIDGE
FIG. 23- PASSERELLE MIMRAM
FIG. 24- SIMONE DE BEAUVOIR FOOTBRIDGE

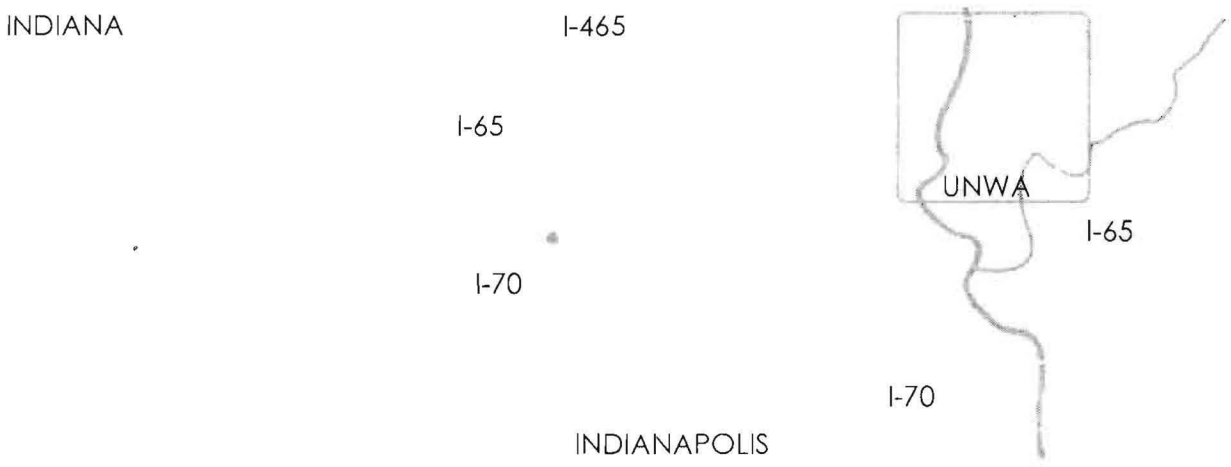
OVERVIEW• ANALYSIS

NEIGHBORHOOD BACKGROUND

The site is the United Northwest Area Neighborhoods (UNWA) in Indianapolis, Indiana. The boundaries of the urban design framework plan neighborhood are 38th Street to the north, I-65 and Martin Luther King Jr. Street to the east, 16th Street to the south, and the White River on the west. The neighborhood covers 2.1 square miles. UNWA itself is an umbrella organization for the Crown Hill, Golden Hill, Maple Road, Near North, North West Way, Northwest, Rivers Edge, Planners, and Riverside neighborhoods, but has come to be known as the name of the neighborhoods collectively. The neighborhood is home to historic residences, remnants of the Central Canal, and parts of George Kessler's original boulevard and park system. The neighborhood is near the Children's Museum, IMA, IUPUI, and hospitals and it borders the proposed 16 Tech Center along 16th Street (City of Indianapolis, 2006).

However, despite all the great amenities and historical value, the area suffers from blight, poverty, and decay. The neighborhood has become a microcosm of the city with high concentrations of wealth on the fringe while centrally located residents face crime, vacancies, and disinvestment. While various plans have been made through the cooperation of the City and the neighborhood associations, a clear, urban design framework is necessary to create connections between the amenities, improve the livability and health for residents, and draw investment and jobs back into the community.

FIG. 25- INDIANA
FIG. 26- INDIANAPOLIS
FIG. 27- UNWA



CONTEXT

The neighborhood sits in the heart of a vast number of Indianapolis focal points—the Indianapolis Museum of Art, the Children's Museum, IUPUI, the new life sciences health campus along 16th Street, and is a short drive from downtown. It is also surrounded by a concentration of wealth along the outer fringes of the neighborhoods. Connections need to be made to all these amenities and areas in order to foster growth, upward mobility, and livability for all residents.

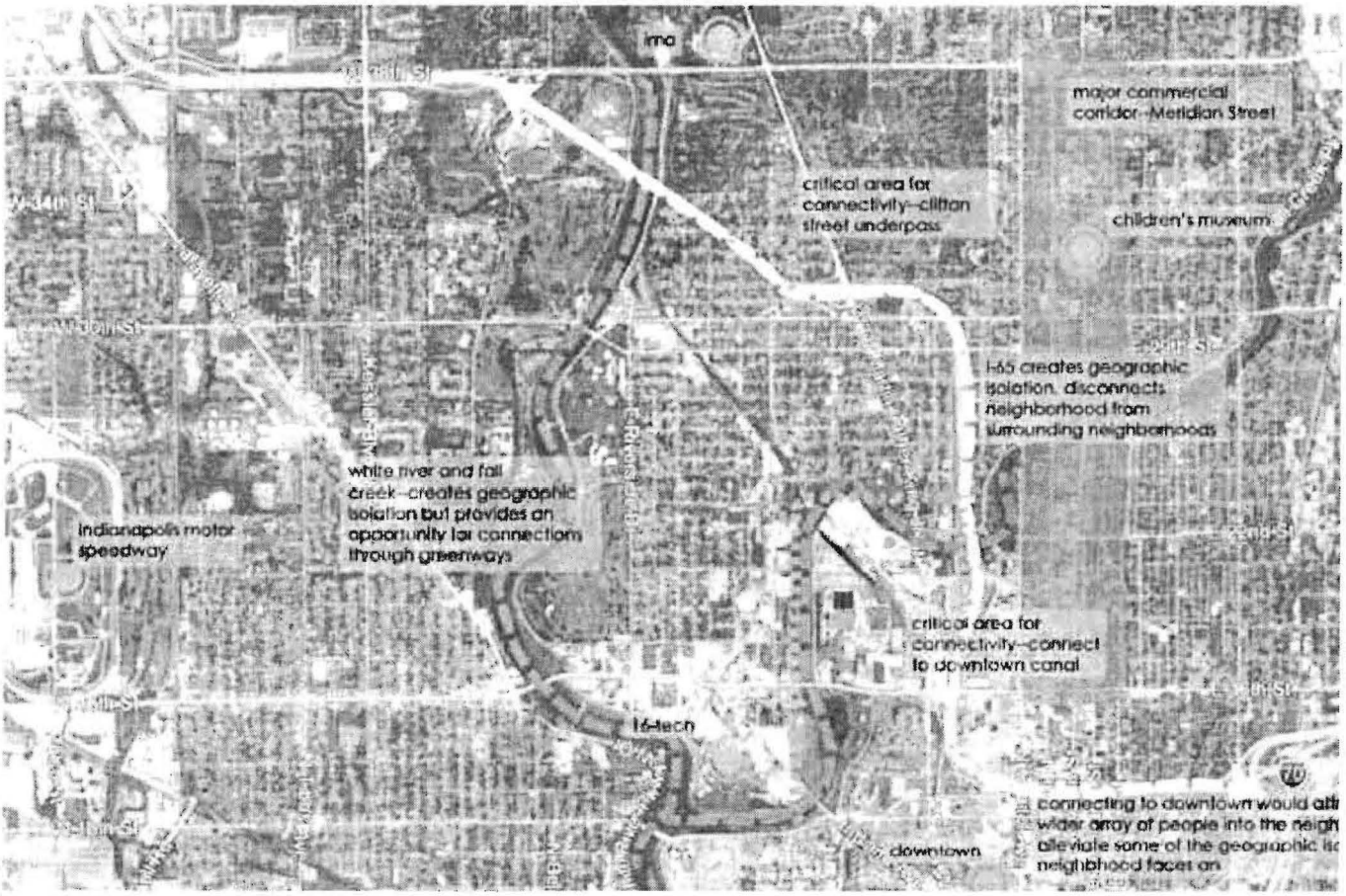


FIG. 28- CONTEXTUAL MAP

DEMOGRAPHIC PROFILE

In 2000, 13,381 people lived in the United Northwest Area Neighborhood, but by 2010 the population dropped to 8,331. 90% of the neighborhood is African American while 6% is White. The ancestry of the neighborhood varies from European, African, Middle Eastern, and West Indian, making this a culturally-rich neighborhood. As of 2000, 32.8% of the neighborhood was between 45-65 years old, and in 2010 it increased to 35%.

2000 Census statistics show 28.01% of the neighborhood was below the poverty line compared to 8.7% of Marion County (The Polis Center at IUPUI, 2012). In 2000, 25.7% of households were female-headed households.

The area was once part of the Department of Justice's Weed-n-Seed program. The goal of the program was to decrease crime in the neighborhoods and as this is now expired, there is increasing interest on programs and strategies to decrease the crime rate of the neighborhood. As of 2004, there were a total of 129.6 crimes per 1,000 people compared to the 110.2 crimes per 1,000 people for the entire Indianapolis Police Department Service District. The most common crime was burglary (30.0) followed by simple assault (29.6) and larceny (20.5) (City of Indianapolis, 2006).

2000 Census statistics show that 25.5% of persons over 25 years old have not received their high school diploma compared to 12.4% of Indianapolis (Indianapolis Univeristy Purdue University Indianapolis Polis Center). The unemployment rate of the area was 7.97% compared to 3.71% in Marion County as a whole in 2000. As of 2010, 82.8% of students in the neighborhood schools qualify for free or reduced school lunches and 2,199 (26.3%) families received SNAP food stamps (Indiana Department of Education, 2010) (City of Indianapolis, 2006).

Total population		8331	100%
	White	526	6%
	African American	7539	90%
	Asian	19	.2%
	Other	247	3%
Age	Total	8331	100%
	Under 18	2180	26.2%
	19-34	2006	27%
	35-65	2916	35%
	+ 65	1229	14.8%

FIG. 29- SUMMARY OF DEMOGRAPHIC PROFILE

HOUSING AND VACANCY PROFILE

THE MAJORITY OF HOUSING STOCK WAS BUILT PRIOR TO 1939 AND IN SOME CENSUS TRACTS NO NEW HOMES HAVE BEEN CONSTRUCTED SINCE THE 1970'S.

Forty-six percent of the housing units in UNWA were owner-occupied compared to Marion County's 59%. The housing units are characterized by two-story wood frame houses. As of 2006, twenty percent (20%) of the housing units were vacant and 750 were abandoned. This information also states that 50% of residential properties are in need of maintenance (City of Indianapolis, 2006). As of 2009, the American Community Survey Data shows vacant housing units rose to 32.5%. The majority of housing stock was built prior to 1939 and in some census tracts no new homes have been constructed since the 1970s.

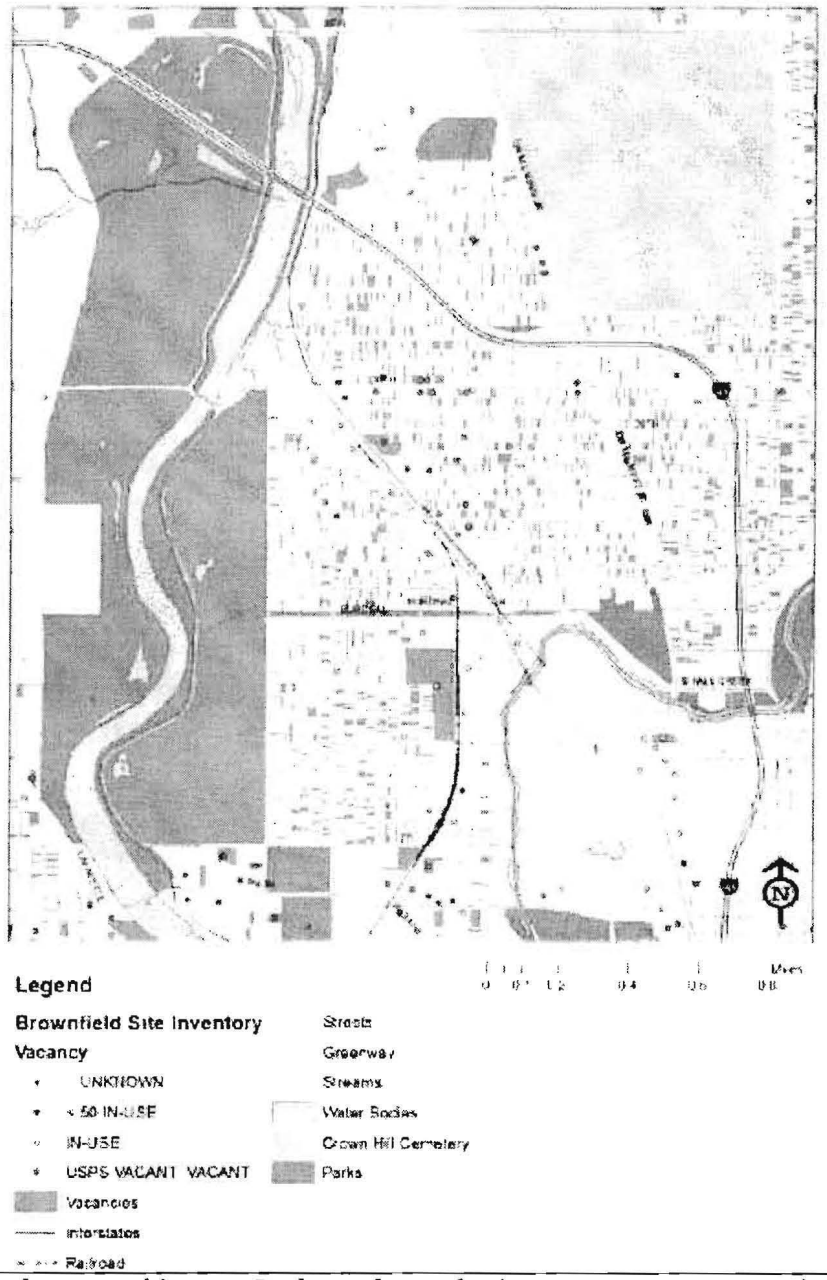


FIG. 30- VACANCIES MAP

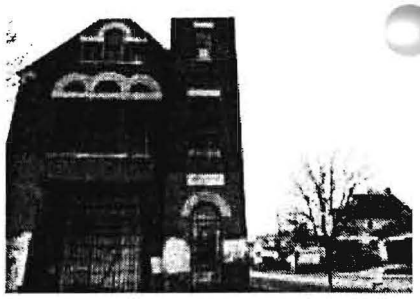
INVENTORY

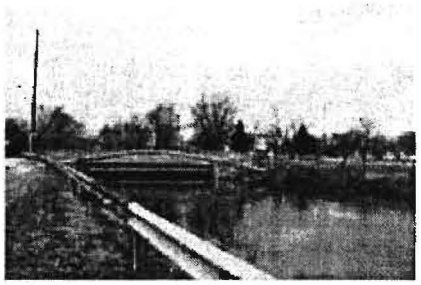
The UNWA Neighborhood is home to 285 acres of park and open space (18% of total land area) and the Burdsal Parkway has over 6 acres of tree-lined medians. The neighborhood boasts a number of elements from Kessler's original Park and Boulevard Plan including Riverside Park, the areas adjacent to the White River and Fall Creek, and Burdsal Parkway. Riverside Park contains a number of features including picnic shelters, playgrounds, baseball diamonds, basketball courts, football fields, softball diamonds, and tennis courts. The area is also home to Watkins Park, Barton Park, Bertha Ross Park, Frank Young Park, and High way Parcel #15 (City of Indianapolis, 2006). There is also an abundance of golf courses in and around the neighborhood—four at last count.

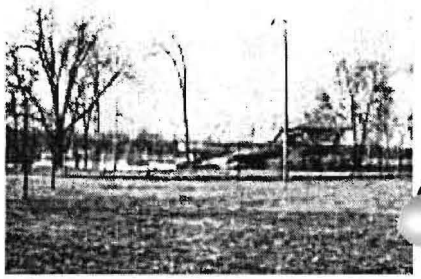
The neighborhood boasts a number of historic sites and structures including the Ritz Theatre, Thomas Taggart Riverside Park Monument, and Riverside Park United Methodist Church. Three sites are on the National Register of Historic Places. These are Golden hill Historic District, Crown Hill National Cemetery, and the Indianapolis Park and Boulevard System (City of Indianapolis, 2006).

The neighborhood is home to five schools--four elementary schools and one combined junior high and high school. Three elementary schools and the junior high/high school are public and one elementary school is a parochial school. One of the elementary schools, Riverside elementary, is listed on the National Register of Historic Places. The neighborhood is also home to over 35 churches and religion institutions. The neighborhood library--The Flanner House Branch--is located along Martin Luther King Jr. Street.

Finally, the neighborhood has 7 bus routes that travel through or along the edges of the neighborhood. Stops are located at nearly every intersection.







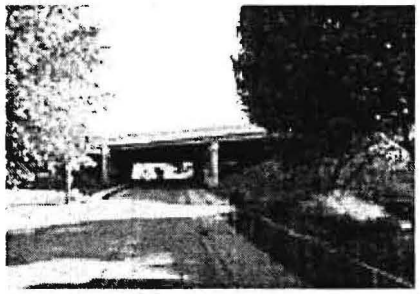
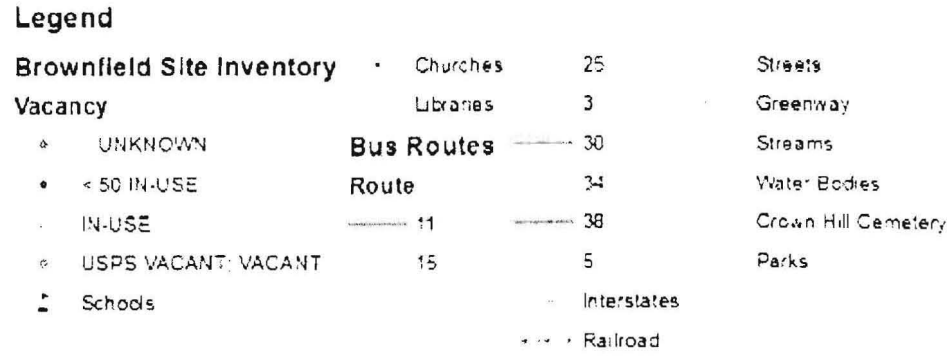
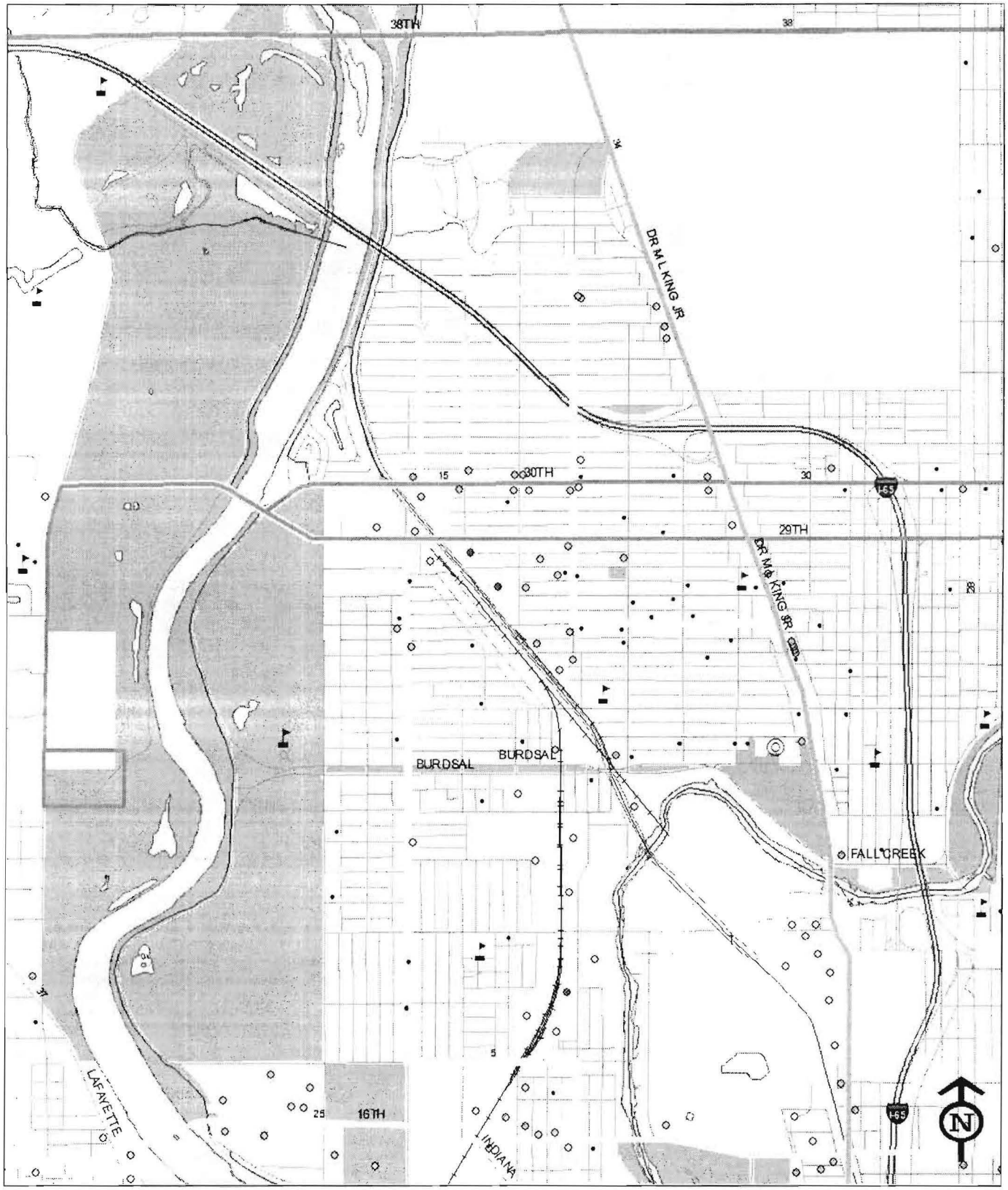


FIG. 31- HISTORIC FIREHOUSE
FIG. 32- CANAL AT BURDSAL PARKWAY
FIG. 33- SWIMMING POOL AT RIVERSIDE PARK
FIG. 34- SOLE NORTH-SOUTH CONNECTION AT CLIFTON STREET




38TH
DR M L KING JR
30TH
29TH
DR M L KING JR
BURDSAL
BURDSAL
FALL CREEK
LAFAYETTE
16TH
INDIANA
I-65
I-65
N
0 0.1 0.2 0.4 0.6 0.8 Miles

CONTEXTUAL ANALYSIS • WALKABILITY

An analysis of the walkability of the neighborhood found that while UNWA has a traditional grid system, greenway access, and a close proximity to downtown, it lacks the destinations, short block lengths, safety, and complete urban fabric necessary for a truly walkable neighborhood. This analysis was generated through walkscore.com.

FIG. 36- WALKABILITY ANALYSIS, WALKSCORE.COM

factors that limit walkability:

- lack of jobs, destinations
- incomplete sidewalk connections
- vacancies
- long block lengths

CONTEXTUAL ANALYSIS • TREE SU RVEY

DETERMINING FACTORS

Income

Median household income

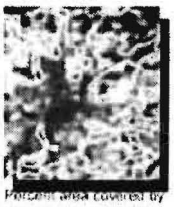
Darker colors indicate higher income

Crime

Crimes per square mile (adult and juvenile)

Darker colors indicate higher crime density

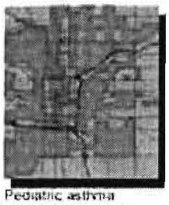
Canopy Density



Percent area covered by tree canopy within 800

Brown indicates lower than average tree canopy

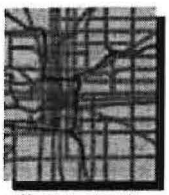
Pediatric Asthma



Pediatric asthma hospitalization rates per 100,000 children ages 5-14

Above average rates (pink)

Auto Emissions

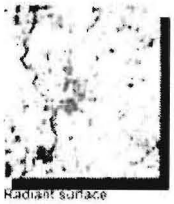


Major streets with a 500 foot buffer

Impervious Surfaces

Impervious surfaces (black)

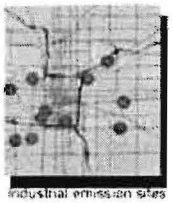
Radiant Temperature



Radiant surface temperature

Highest temperatures (red)

Industrial Emissions



Industrial emission sites with a designation of Title V

Within ½ mile (red)

Zoning

Zoning with residential shown in pink

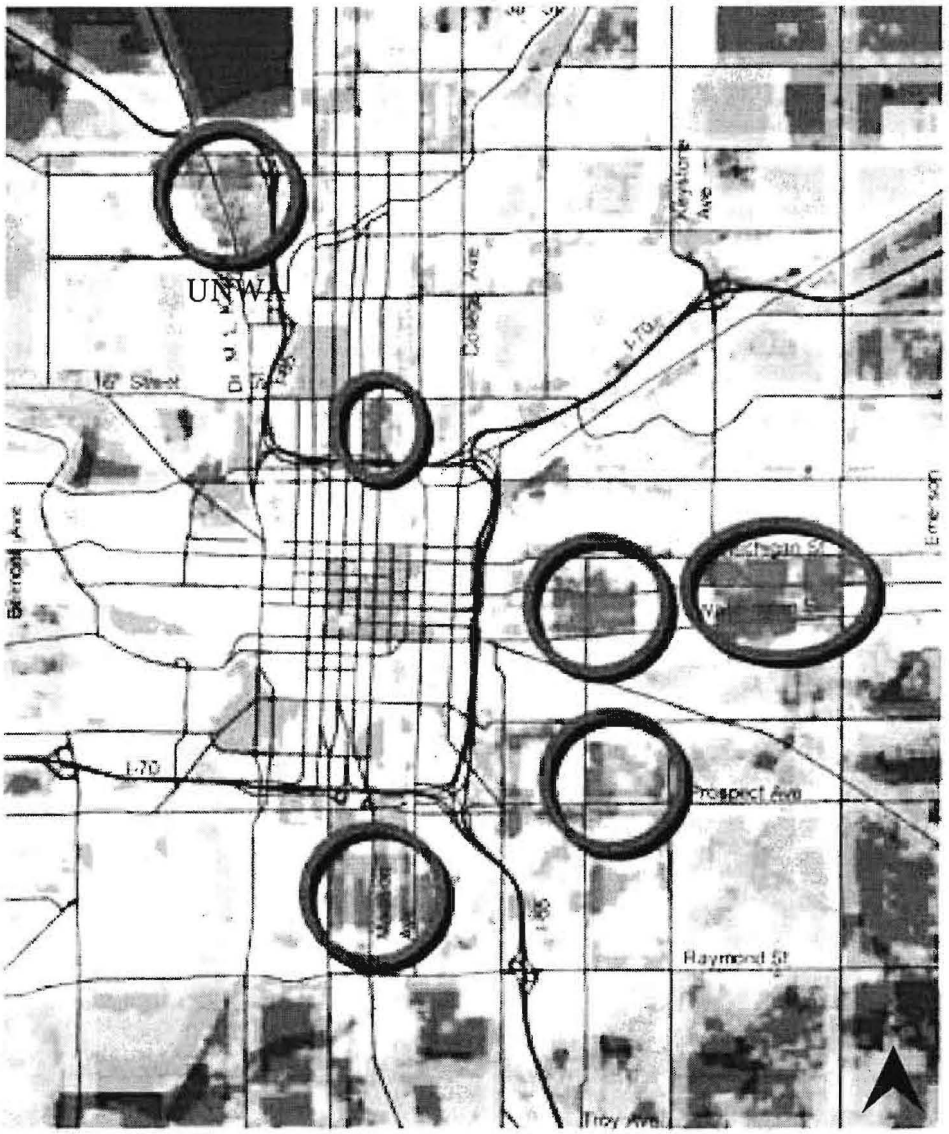


FIG 37-45
ANALYSIS CRITERIA
FIG. 46
FINAL TREE SURVEY MAP

In 2007, Indiana University Purdue University Indianapolis (IUPUI) and Keep Indianapolis Beautiful (KIBI) produced a tree survey to document which neighborhoods and locations in Indianapolis that could use tree cover to meet critical environmental and human needs. Trees help reduce crime, pollution, and energy costs and they increase property values (Keep Indianapolis Beautiful, Inc., 2009)

Blue areas meet less than half the criteria and are not considered critical areas. Yellow and orange locations met more than half the criteria while red areas met all the criteria. The area identified as UNWA meets all the criteria in over half the neighborhood.

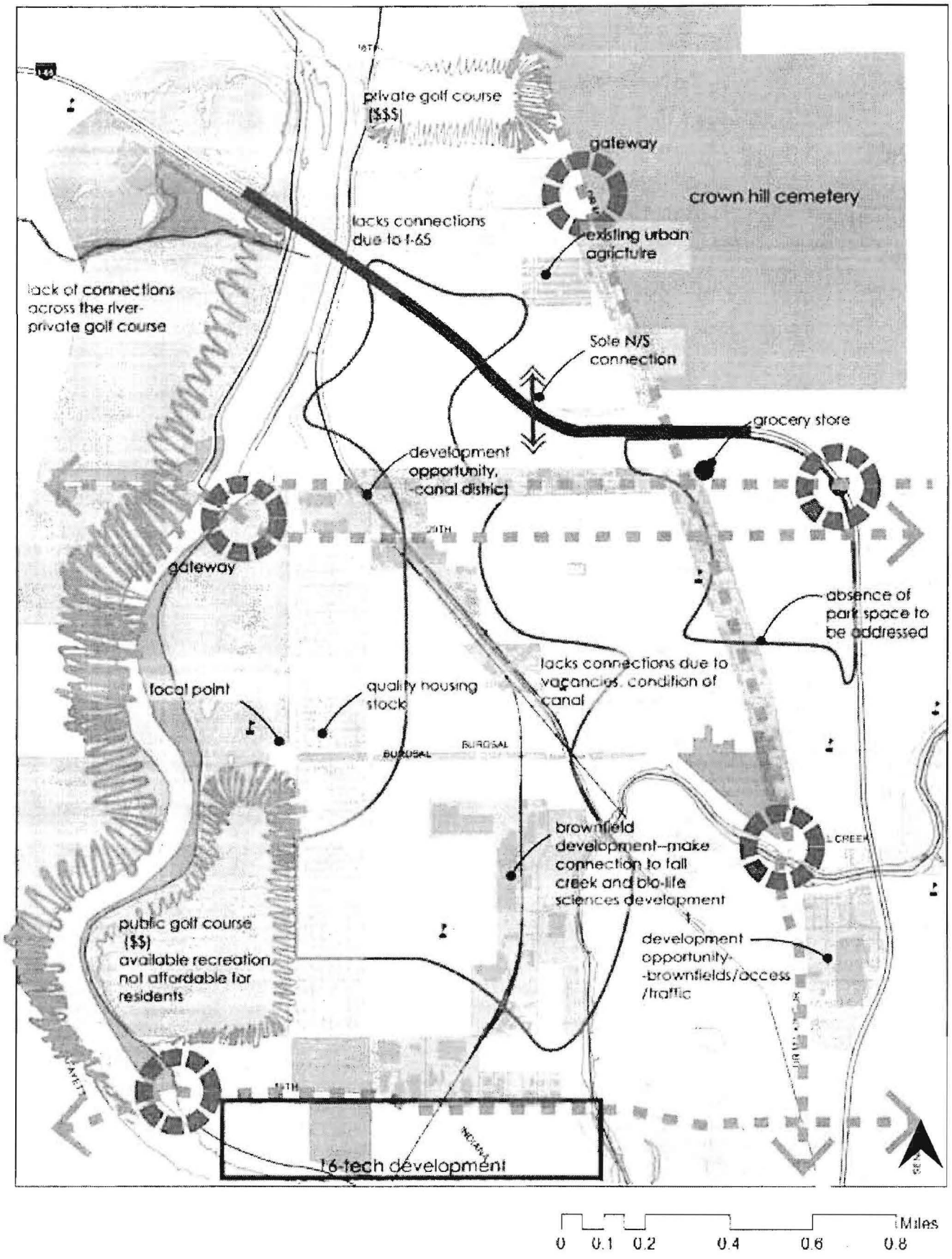
ANALYSIS

While the neighborhood boasts many significant features, these features lack a connective tissue to bring them together, create social cohesion, and celebrate the identity within the neighborhood. The Wapahani trail lies along the western edge of UNWA and the Fall Creek Trail lies along the southern edge. The canal, bisecting the neighborhood, has the potential to act as a connective link between the two trails as well as a connector to downtown. There is also the potential for pedestrian connections across the canal.

UNWA lacks the economic connections it needs to be a sustainable neighborhood. With the abundance of brownfields available for development, there is great potential for both retail and residential development along the canal, MLK, and near Fall Creek.

The historic sites and structures will need to be preserved and featured to create a sense of place and celebrate the history of the neighborhood. The neighborhood also lacks a clear sense of identity outside these historic sites and structures--no streetscape, design elements, or gateways give a clear sense of place for the neighborhood. One challenge will be to connect the neighborhood to the existing, unique MLK streetscape without taking away from the neighborhood's own identity. The MLK streetscape should not drive the design elements of the neighborhood, but should influence them to an extent.

Finally, the lack of park space must be addressed and adjusted according to the National Recreation and Park Association (NRPA) standards.


private golf course
($$$)
gateway
crown hill cemetery
lacks connections
due to I-65
existing urban
agriculture
lack of connections
across the river-
private golf course
Sole N/S
connection
grocery store
development
opportunity,
-canal district
gateway
absence of
park space to
be addressed
lacks connections due to
vacancies, condition of
canal
focal point
quality housing
stock
brownfield
development--make
connection to fall
creek and bio-life
sciences development
public golf course
($$)
available recreation
not affordable for
residents
development
opportunity-
-brownfields/access
/traffic
16-tech development
0 0.1 0.2 0.4 0.6 0.8
Miles

RETAIL • RESIDENTIAL ANALYSIS

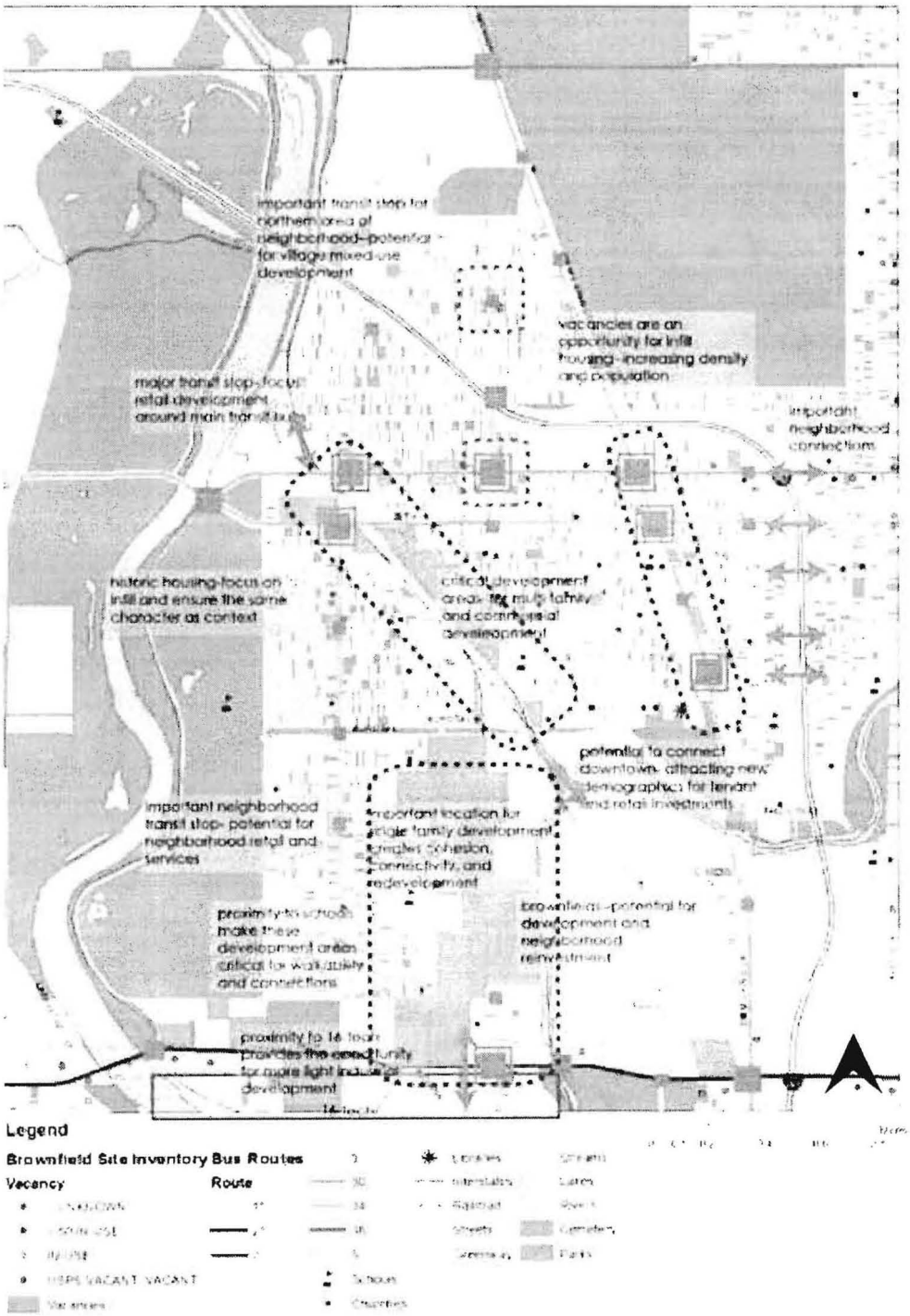


FIG. 48

An analysis of the retail and residential development resulted in a variety of conclusions that can be seen in the framework. Review of the various cultural districts and successful mixed-use developments in Indianapolis aided in the formation of the building typologies and retail and residential development framework guidelines. Two precedents included Mass Ave and Broad Ripple. These are seen in the figures below.

Finally, an analysis of the consumer expenditures and retail sales revealed where the residents were spending money and what the neighborhood economy was making. The bleed in various categories helped determine what types of retail and commercial establishments would be successful within the UNWA neighborhood.

FIG. 49
MASS AVE

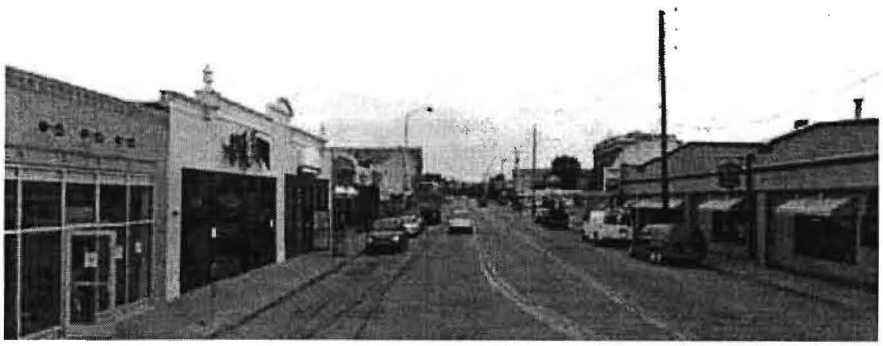


FIG. 50
BROAD RIPPLE

RETAIL • RESIDENTIAL ANALYSIS

	$ Per HH	Total $000s
Consumer Expenditures (2002)		
Apparel	1,834	9,109
Entertainment	1,683	8,362
Food and Beverages	5,339	26,522
Health Care	2,004	9,958
Household Furnishings and Equipment	1,275	6,334
Household Operations	963	4,785
Personal Care	587	2,918
Reading	175	868
Tobacco	289	1,436
Transportation	6,686	33,214
Gifts	978	4,858

After examining the expenditures and retail sales it was concluded that the following types of retail establishments would have the highest possibility of success in the UNWA neighborhood

- apparel and shoes
- restaurants
- drug and grocery stores
- specialty retail
- personal care, hair care, etc.
- hardware and household supplies stores

Retail Sales (2002)	
Lumber and Building Materials	2,590
Paint and Wallpaper	2,437
Hardware	0
Nurseries, Lawn and Garden	1,192
Department Stores	0
Variety and Other General Merchandise Stores	1,488
Grocery Stores	2,198
Candy and Confectionery Stores	0
Bakeries	0
Motor Vehicle Dealers	39,315
Gasoline Service Stations	1,135
Apparel Stores	0
Shoe Stores	0
Furniture Stores	248
Appliances	0
Radio, TV, and Consumer Electronics	192
Restaurants	6,011
Bars	537
Drug Stores	0
Liquor Stores	11,670
Sporting Goods and Bicycles	594
Books and Stationary	2,924
Hobby, Toy, and Game Shops	0
Florists	60
Other Retail Establishments	1,890

PARK • OPEN SPACE ANALYSIS

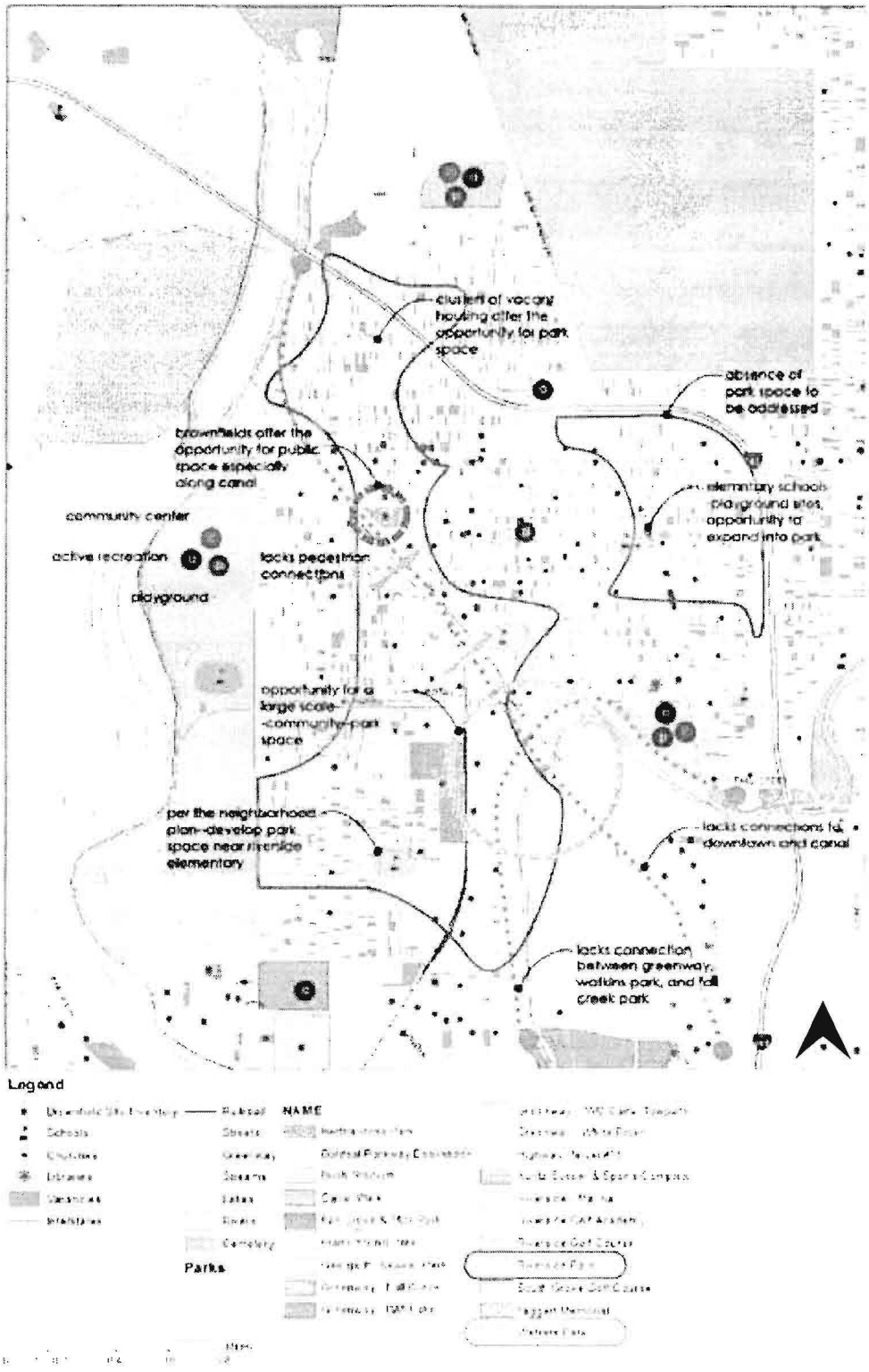
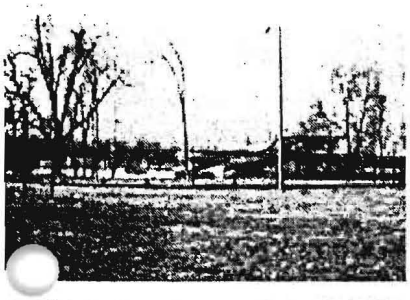


FIG. 51



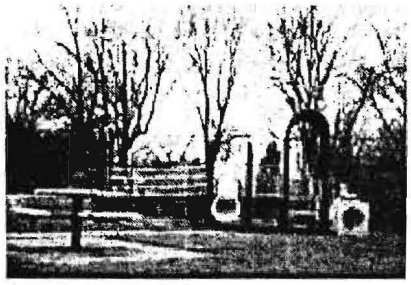
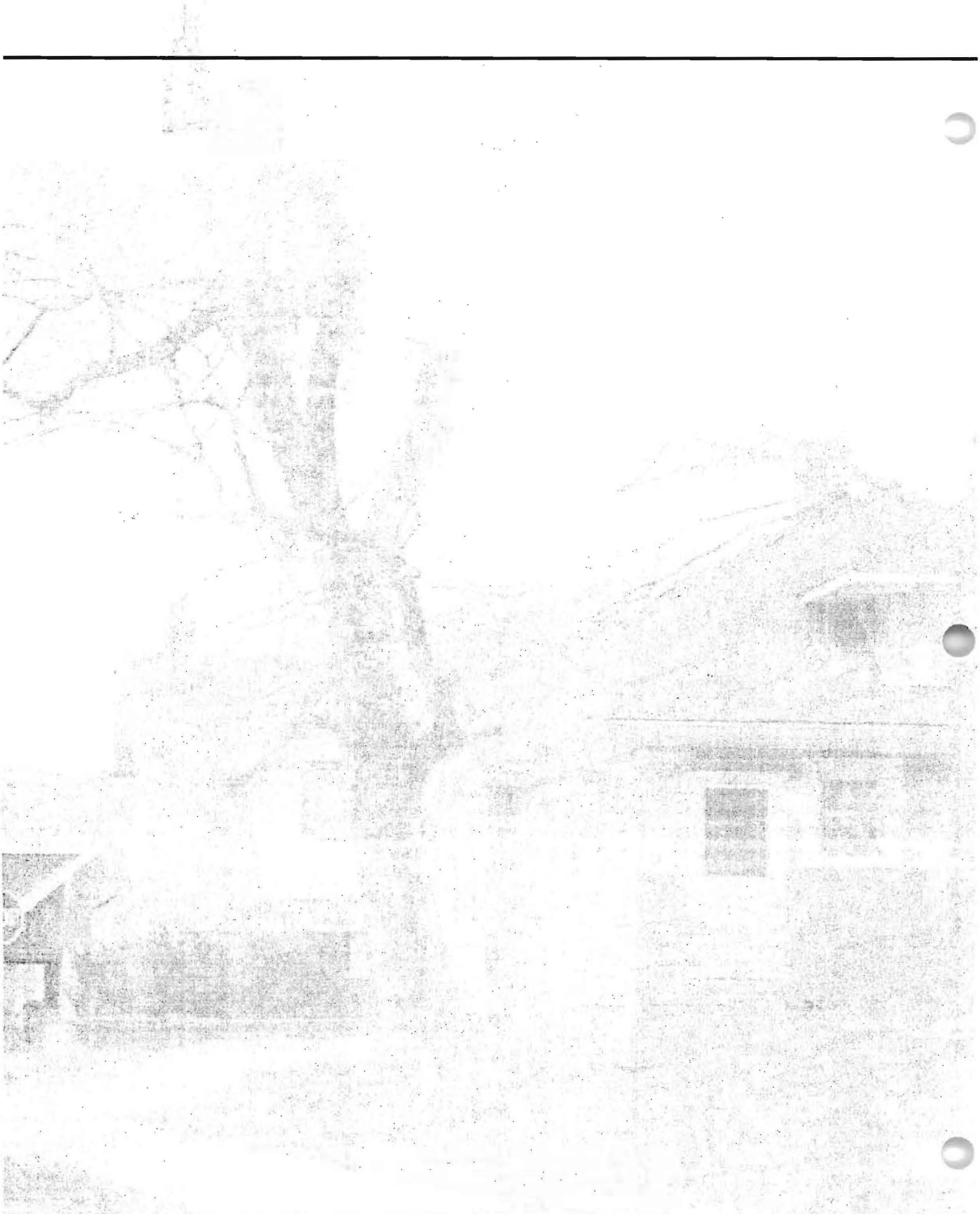


FIG. 52-56
IMAGES FROM PARKS WITHIN UNWA, PAVILIONS, BASKETBALL COURTS, SWIMMING POOL, PLAYGROUNDS

An analysis of the park and open space revealed how the current amount of park space compared with the NRPA recommendations for park space per 1,000 population. Infill and new residential development will add to the population and therefore the framework guidelines must be written to accommodate the shifts and changes in population but also encourage an abundance of park and open space.

The location of the additional park space is determined by the proximity to residents. As a standard, a healthy neighborhood will have all residents within a quarter-mile walking distance of park and open spaces. As one can see from the analysis diagram, the neighborhood has various patches that are not within 1/4 mile walking distance of open space. These are the locations where new park space can be added. Brownfields are also ideal sites for new park and open space, and these are also called out on the analysis diagram.

The analysis also revealed where the locations for active recreation are, what the neighborhood lacks and where new basketball courts, baseball fields, and other active and programmed recreaction can be located. Playground locations were also determined



URBAN DESIGN FRAMEWORK

GUIDING PRINCIPLES

A healthy environment is welcoming to all incomes, ages, and races and has a clear identity and **sense of place**.

A healthy environment offers the opportunity for **physical activity** through walking, biking, and recreation.

A healthy environment is **connected**, both within the neighborhood and to the greater Indianapolis area.

A healthy environment has a **mixture of land uses**, encourages investment, fosters economic growth, and provides adequate services for residents.

A healthy environment offers a variety of **social outlets** and encourages networking and interaction between residents and visitors.

A healthy environment is a **safe** place, where residents feel free to walk, exercise, and socialize.

A healthy environment provides access to **fresh food** from both local producers and full service grocers.

NEIGHBORHOOD AND REGIONAL CONNECTIVITY

"CONNECTION IS HEALTH. AND WHAT OUR SOCIETY DOES ITS BEST TO DISGUISE FROM US IS HOW ORDINARY, HOW COMMONLY ATTAINABLE, HEALTH IS. WE LOSE OUR HEALTH - AND CREATE PROFITABLE DISEASES AND DEPENDENCES - BY FAILING TO SEE THE DIRECT CONNECTIONS BETWEEN LIVING AND EATING, EATING AND WORKING, WORKING AND LOVING."
-WENDELL BERRY

Perhaps the most important aspect of healthy neighborhood design is connectivity—both within the neighborhood and to the greater Indianapolis context. Connectivity is not merely physical, but also economic, social, and visual. Physical connections relate to the street grid network, destinations, and the presence of physical features such as sidewalks. As Americans have become more reliant on the automobile, spending an average of 443 hours a year behind the wheel, air pollution, respiratory diseases, and incidence of obesity have increased as well (Jackson & Kchtitzky). While inner city neighborhoods are categorized by grid patterns, barriers such as the lack of sidewalks, lack of destinations, and large block sizes may prevent residents from choosing to walk instead of drive. For needs beyond the neighborhood, access to public transit is important. However, simply the lack of sidewalks, curb cuts, and bus shelters could also prevent residents from choosing the utilizing public transport (Weathers, 2007). Just over half of residents live within ¼ mi. of public transit in Indianapolis (Weathers, 2007).

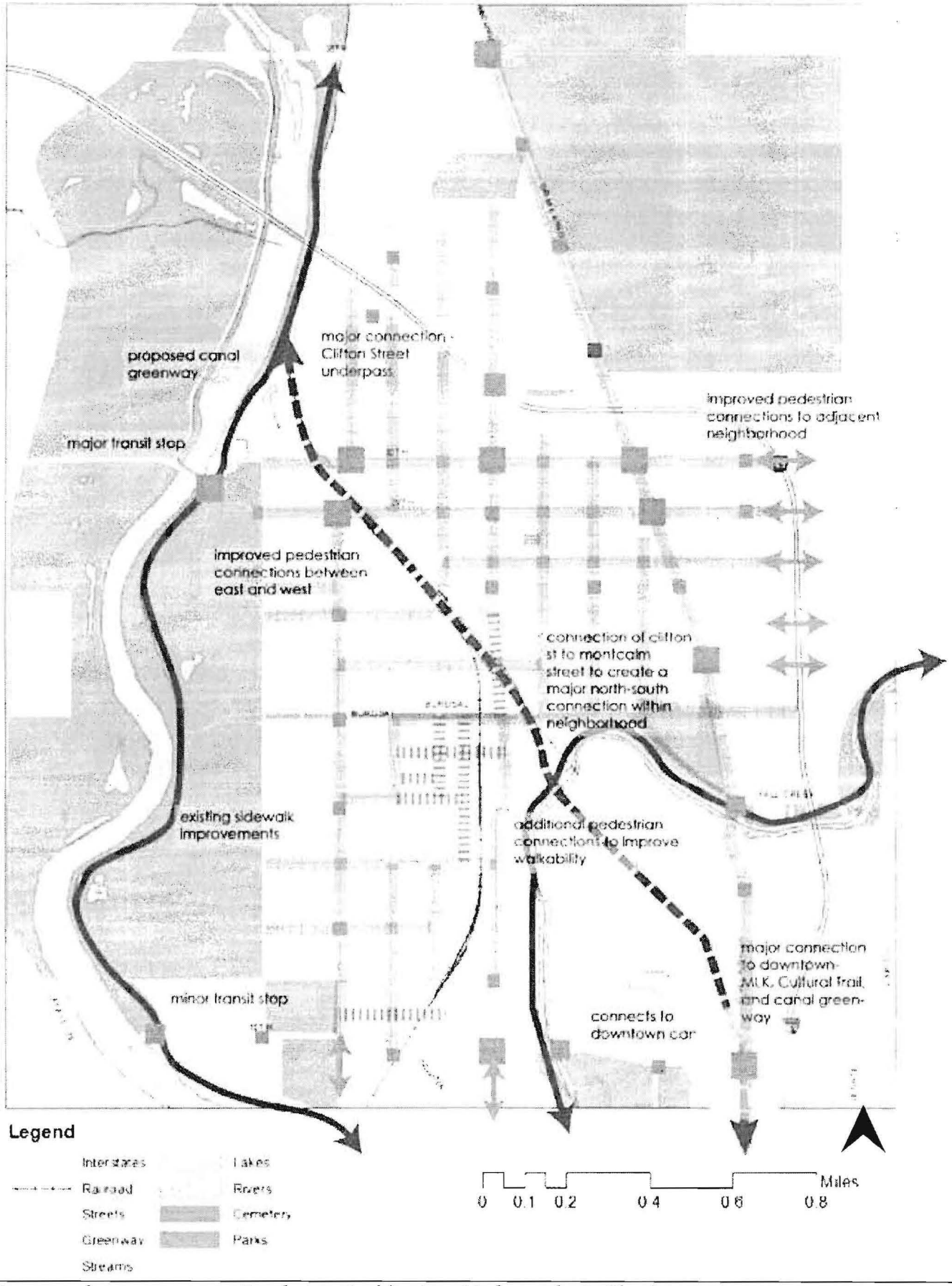
A lack of connectivity prevents the development of social networks and community support. Open spaces and greenways provide the opportunity for social connectivity, and the lack thereof prevents relationships from forming. Less than a third of Indianapolis residents live within ¼ mi. of a park or greenway, and while UNWA has 378.7 acres of park and open space, as residents move back into the neighborhood, park and open space must increase as well (Weathers, 2007).

Parks and open space connectivity is addressed later in the guidelines. Greenways also provide connectivity within the neighborhood and to the greater Indianapolis context. UNWA lacks these greenway connections as well.

As jobs and industries have moved out of the inner-city to the suburbs, the neighborhoods have lost their economic connectedness to the surrounding regional context. The proximity of grocery stores, restaurants, retail facilities and industries are strongly associated with walkability and connectivity (Thompson & McCue). Providing basic needs within the neighborhood, places to live, work, and play, encourages active transport. This aspect of connectivity is addressed in the land use and development sections later in the guidelines.

As the incidence of walking and biking increases, health does as well. As the use of automobiles decreases, pollution decreases, streets become safer, and the amount of people in the public realm increases leading to more nurtured community relationship. Connectivity is the key to healthy neighborhoods.

FIG. 57


proposed canal greenway
major connection - Clifton Street underpass
improved pedestrian connections to adjacent neighborhood
major transit stop
improved pedestrian connections between east and west
connection of clifton st to montcalm street to create a major north-south connection within neighborhood
existing sidewalk improvements
additional pedestrian connections to improve walkability
major connection to downtown- MLK Cultural trail and canal greenway
minor transit stop
connects to downtown car
Legend
Interstates
Railroad
Streets
Greenway
Streams
Lakes
Rivers
Cemetery
Parks
Miles
0 0.1 0.2 0.4 0.6 0.8

FRAMEWORK GUIDELINES

Transit

Consolidate bus stops to create transit nodes throughout the neighborhood that encourage residents to walk to stops, use transit, and create a more efficient transit system

Create a clear hierarchy of stops using signage, shelter design, and stop design

Encourage transit use by improving stop locations with pedestrian conveniences

- Make sidewalks wide enough to accommodate pedestrian activity by those of all abilities
- Create shelters to protect users from the elements and furnish shelters with seating and/or places to lean
- Provide bike racks and adequate parking facilities to encourage biking to transit

Neighborhood Connections

Enhance sole north-south connection at Clifton Street to create a more prominent neighborhood connection

Connect Clifton Street to Montcalm Street, creating a direct north-south connection within the neighborhood

Pedestrian Pathways and Connections

Create new greenway along Canal to create a connection through the neighborhood to the surrounding existing trail and greenway system

- Establish pedestrian bridges across the canal
- Provide seating, lighting, drinking fountains, and other infrastructure needed to support and encourage use.
- Provide access to transit

Provide crosswalks and curb extensions to create safer pedestrian crossings on roadways

GATEWAYS, HEARTS AND EDGES

"IT IS PLACE, PERMANENT POSITION IN BOTH THE SOCIAL AND TOPOGRAPHICAL SENSE, THAT GIVES US OUR IDENTITY."
--J.B. JACKSON

The identity of a neighborhood lies in the quality of the infrastructure, gateways, public open spaces, and architecture. Decaying surrounding and a lack of identity may lead to a negative stigmatization by those outside of the neighborhood. This can lead to feelings of powerlessness and can even reduce social and economic opportunities for neighborhood residents (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010).

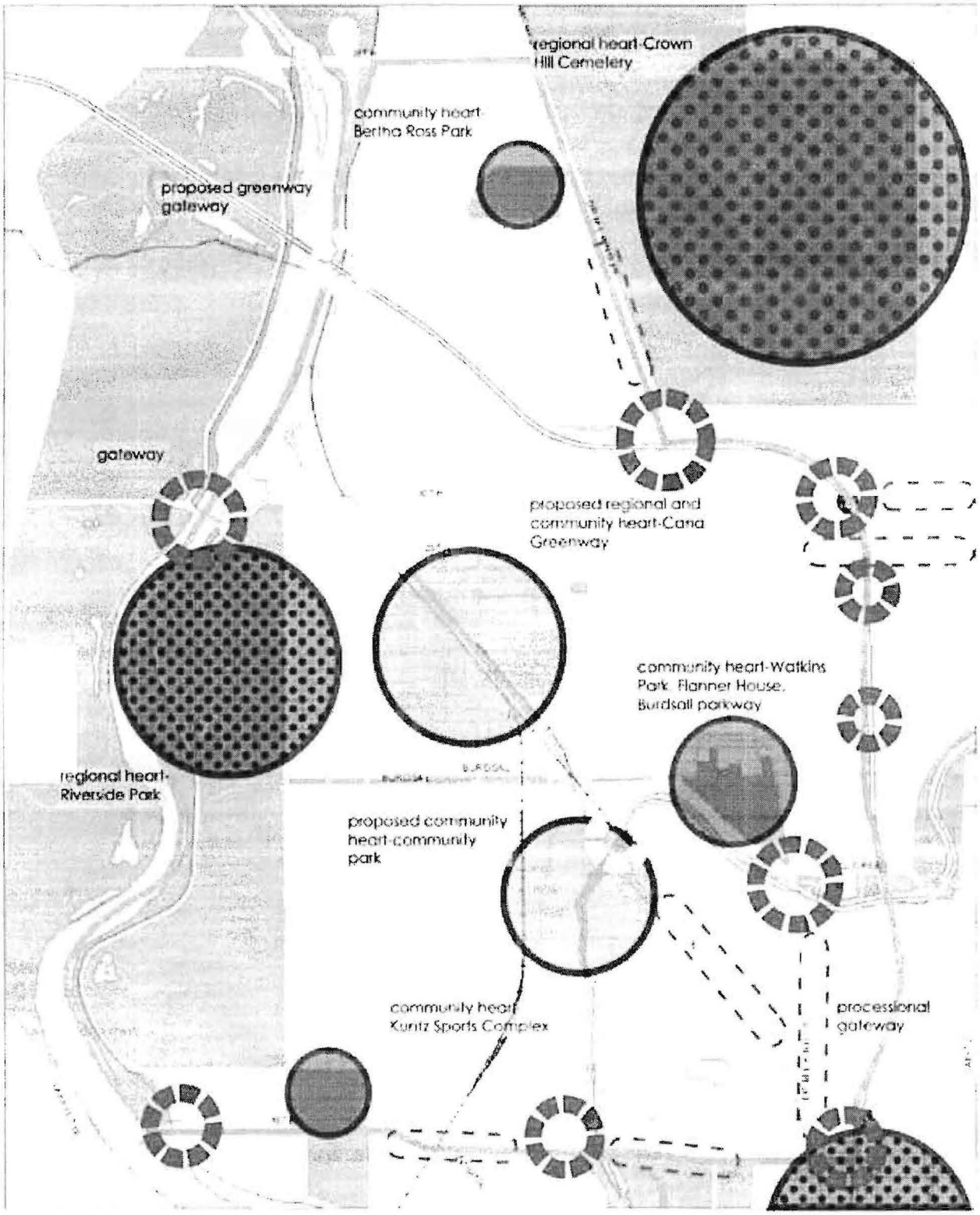
Gateways are the identifiable entrances or departures into and out of the neighborhood. It is as these gateways that residents and visitors recognize they are entering into the United Northwest Area neighborhood. These transitions provide physical and visual markers for the community to notice they are entering the neighborhood (City of Seattle Department of Planning and Development, 2010). The most important gateways in UNWA are along the major vehicular corridors on the edges of the neighborhood, however, other gateways can be found along pedestrian corridors such as the canal, Wapahani Trail, and Fall Creek Trail.

Hearts are the centers in the neighborhood both residents and the overall Indianapolis context associate with the neighborhood. Hearts can be either community scale--neighborhood nodes and centers of activity--or regional--destinations identified on a larger scale. For example, Crown Hill Cemetery and Riverside Park are two regional hearts.

Not only does the neighborhood identify these destinations they are a regional center of activity as well. Examples of community hearts are Watkins Park, the Flanner House, and Bertha Ross Park. These spaces are the centers for community social, physical, and perhaps commercial activity (City of Seattle Department of Planning and Development, 2010). They are anchors and nodes for community identity and development. Development in these nodes should enhance the central character of the neighborhood through architecture, public art, pedestrian conveniences, and uses.

Edges are simply the boundaries associate with the neighborhood. They separate UNWA from the surrounding neighborhoods physically and visually. Design of the edges is more clearly addressed through the gateways. The edges are central to understanding the physical, social, and economic setting of the neighborhood (City of Seattle Department of Planning and Development, 2010).

FIG. 58


regional heart-Crown Hill Cemetery
community heart-Bertha Ross Park
proposed greenway gateway
gateway
proposed regional and community heart-Cana Greenway
community heart-Watkins Park, Flanner House, Burdsall parkway
regional heart-Riverside Park
proposed community heart-community park
community heart-Kuntz Sports Complex
processional gateway
Legend
Interstates
Railroad
Streets
Greenway
Stream
Lakes
Rivers
Cemetery
Parks
Miles
0 0.1 0.2 0.4 0.6 0.8

FRAMEWORK GUIDELINES

Gateways

Enhance physical gateways through signage, lighting, and paving details

> Ensure clear pedestrian connections and provide a safe environment through pedestrian conveniences

Enhance pedestrian gateways through use of signage, pedestrian conveniences, lighting, and paving patterns along greenways

Hearts

Ensure the Canal becomes a destination in itself through unique streetscapes and design features, however, ensure cohesiveness to the surrounding neighborhood

Establish a community park along Fall Creek that will connect the residents within the neighborhood as well as connect the neighborhood to the surrounding context

Edges

Create a clear sense of identity through creative, neighborhood specific signage that create a distinct sense of place

> Create a visual connection to the Martin Luther King Jr. streetscape to ensure cohesivness

NEIGHBORHOOD CHARACTER • SENSE OF PLACE

The treatment of edges and gateways are perhaps the most important, identifying aspect of the neighborhood. As mentioned before, the gateways and other design elements must respond to the neighbhorhood history but they must also related to existing streetscapes, hearts, and centers.

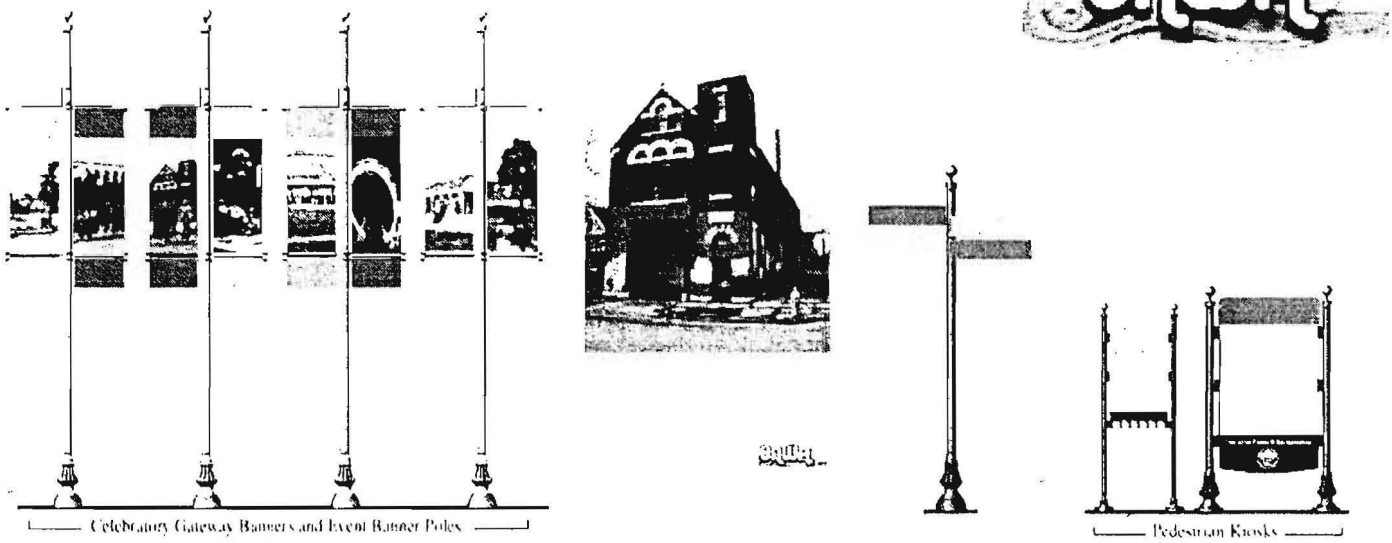
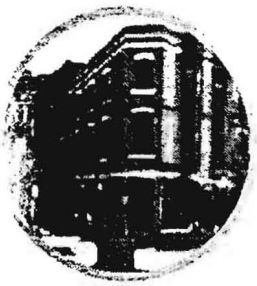


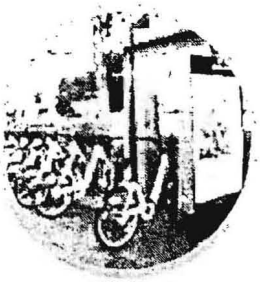
FIG. 59

Above are examples of streetscape elements. The banners, which can be attached to lightpoles or hung independently will have bright bold colors. This abundance of color is symbolic of the abundance of backgrounds, ethnicities, and histories of the neighborhood. They also respond to the existing neighborhood logo. The banners will display black and white pictures of the neighborhood's history. These banners are similar to the MLK streetscape but can be clearly identified as being specific to UNWA. Below are examples of the totem poles that would be sprinkled throughout the neighborhood. They relate back to the historic Golden Hill totem pole while also connecting with the MLK streetscape. They will serve as art installations, gatways, and wayfinding markers.

FIG. 60-62

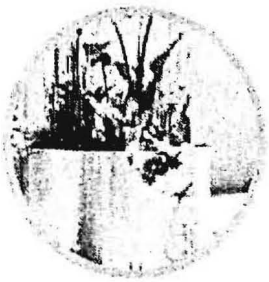
NEIGHBORHOOD CHARACTER • KIT OF PARTS





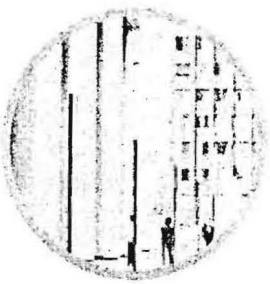


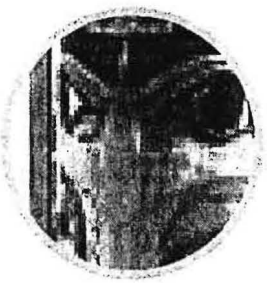


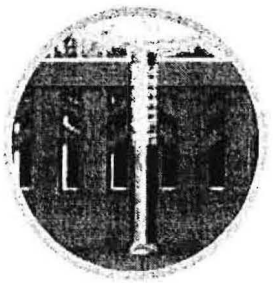













BUILDING CHARACTER • MATERIALS
FIG. 63-67

PUBLIC ART • VEGETATION
FIG. 68-72

OPEN SPACE AMENITIES
FIG. 73-77

PEDESTRIAN CONVENIENCES
FIG. 78-82

STREET CHARACTER

"HEALTHY STREETS MAKE HEALTHY NEIGHBORHOODS"
--DAN BURDEN

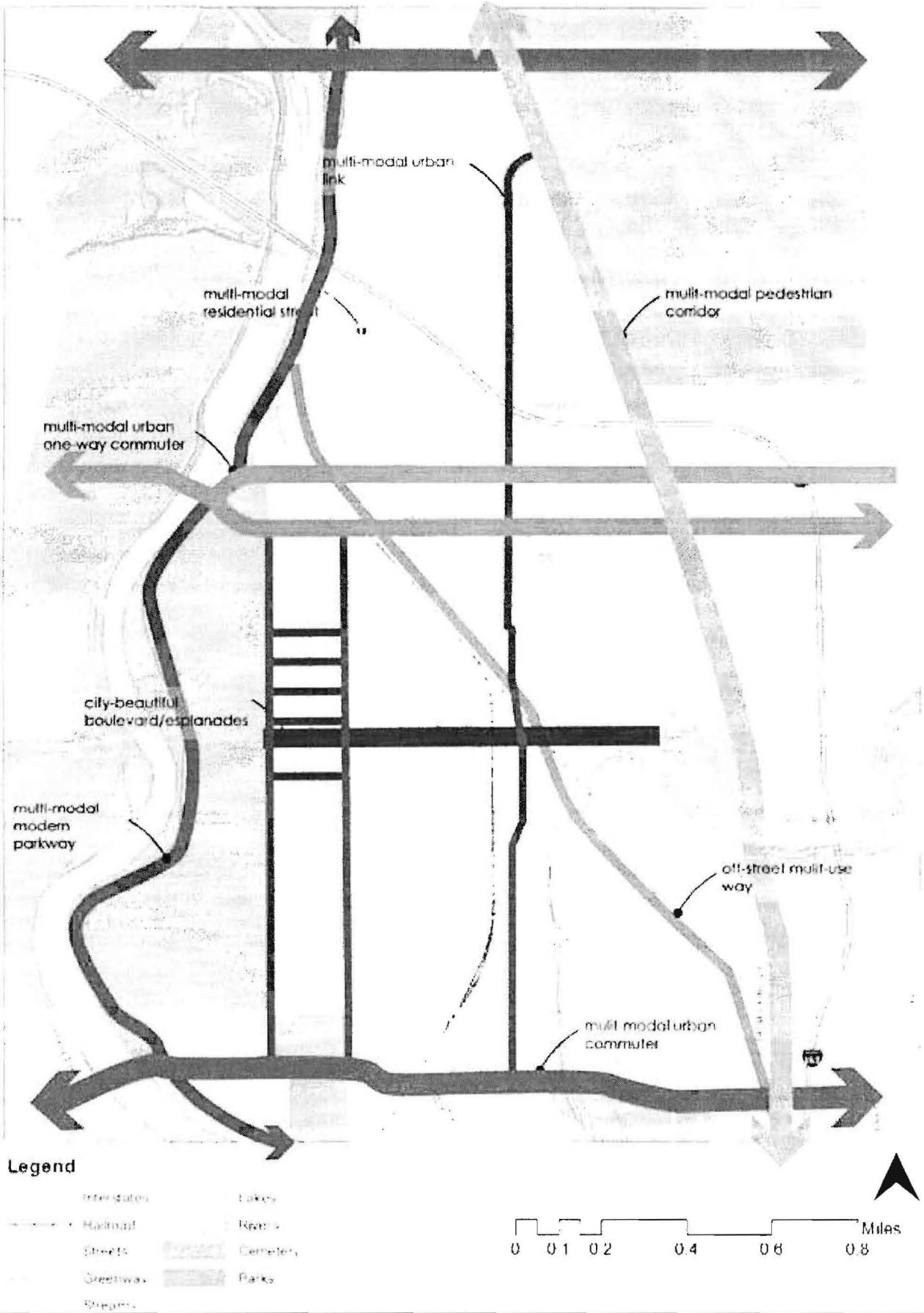
Street design is important for walkability, connections, sense of identity, and safety. As Dan Burden says, healthy streets make healthy neighborhoods. Streets are a major part of a neighborhood's infrastructure. Decaying infrastructure and physical surroundings can have a major impact on the psychological health of residents. It may invoke a sense of powerlessness, fear of crime, and it inhibits residents' ability to walk around their own neighborhood (Galster, The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications, 2010). The character and design of a neighborhood's streetscapes is also very important for the safety of pedestrians. Streets with larger sidewalks, smaller setbacks, trees, lights, and other pedestrian conveniences encourage walking, biking, and other pedestrian uses. Well-designed streets encourage physical activity and social interaction.

One would assume inner-city neighborhoods have better streetscape designs due to design standards in place when their development occurred. While inner-city streets may be much more walkable than suburbs, they typically suffer from the lack of funding and maintenance necessary to ensure they remain walkable. Crumbling sidewalks, a lack of trees and a lack of pedestrian conveniences hinders the opportunity for residents to walk to and from work, home, and school (Lopez & Hynes, 2006). This is especially troublesome for low-income families. Low-income families are twice as likely to walk instead of drive as are people of

other income groups, yet when sidewalks are unusable or simply absent, they are forced to rely on automobiles or stay inside their homes (Murakami & Young, 1997). The absence of pedestrian conveniences such as lighting also leads to a fear of crime, again keeping residents indoors or in their cars (Lopez & Hynes, 2006). Street trees are disappearing due to age, disease, or the lack of funding to replace them, however trees have been shown to improve the perception of the neighborhood, decrease crime, improve air and water quality, reduce energy costs, and increase property values (Keep Indianapolis Beautiful, Inc., 2009; Lopez & Hynes, 2006). Simply focusing on street design and character can make major improvements on the health of a neighborhood.

After extensive analysis of the various street as well as references to the Multi-modal Design Guidelines, the street character map and cross sections were developed. These guidelines are design to guide new street construction as well as street improvements and retrofitting.

FIG. 83


multi-modal urban link
multi-modal residential street
mulit-modal pedestrian corridor
multi-modal urban one-way commuter
city-beautiful boulevard/esplanades
multi-modal modern parkway
off-street multi-use way
mulit modal urban commuter
Legend
Miles
0 0.1 0.2 0.4 0.6 0.8

FRAMEWORK GUIDELINES

Incorporate multiple modes of transit into street design to reduce reliance on the automobile

- Provide markings on the street as well as signage for bicyclists to separate uses
- Provide stops where buses pull off road to pick up passengers
- Provide infrastructure for bicycles including parking facilities and rails

Establish separation zones along appropriate streets for the placement of furnishing, signage, vegetation, lighting and other pedestrian conveniences

Encourage walking and physical activity through the design of sidewalks and pedestrian throughways

- Provide sidewalks at appropriate sizes for their use and universal access
- Provide lighting along paths
- Ensure paths are universally accessible
  - Provide paths and curb cuts that are wide enough for the turning radii of a wheelchair
  - Provide auditory crossings for visibly impaired persons

Develop the Canal into a greenway

- Provide seating, drinking fountains, restrooms, and other infrastructure along pedestrian paths
- Celebrate views downtown along Canal

Traffic Calming

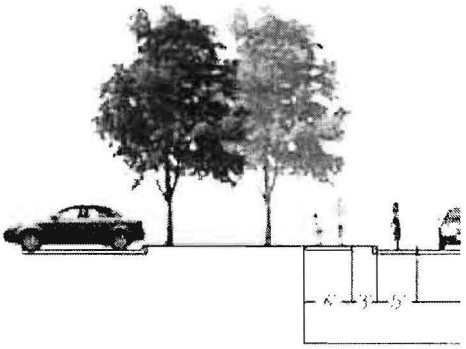
Design roads to be the minimum width and have the minimum number of lanes

Incorporate traffic calming measures such as vegetated buffers, medians, curb extensions, and street-side parking to create safer pedestrian environments

STREET CROSS SECTIONS

Multi-modal pedestrian corridor- Martin Luther King Jr. Street

Martin Luther King Jr. Street provides multi-modal connectivity across the neighborhood while directly accessing local transit and adjacent residential and retail uses. Driveways are limited and parking is consolidated behind store fronts and multi-family dwellings. This street is visibly geared toward pedestrian access and activity, making it socially appealing and essential to the economic viability of the neighborhood.



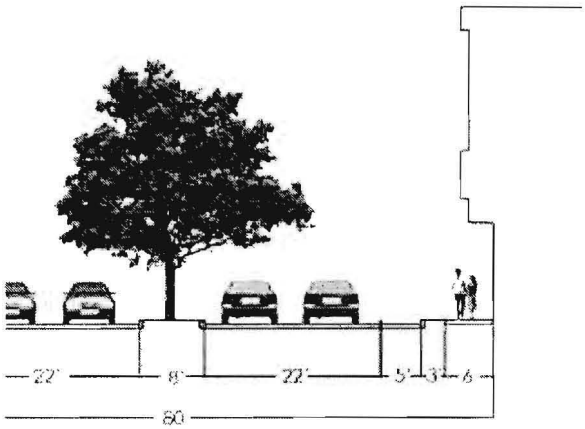
Multi-modal commuter corridor and urban-one way corridors- 16th, 29th, 30th, 38th Streets

These streets provide connectivity both along the borders of the neighborhood as well as through the neighborhood. On–street parking is encouraged while driveways and local access curbs are discouraged. Pedestrian activity zones are infrequent and if they occur they are placed along key cross streets.

Off-street multi-use corridor- Canal Greenway

The Canal Greenway will be the pedestrian highway through the United Northwest Area Neighborhood and provide a major connection to the IMA and neighborhood north of 38th Street as well as the downtown canal. This will be a two-way pedestrian, bicycle, and non-motorized traffic way and may be combined with alternate forms of transportation such as boats. Refer to canal master plan for typical cross sections.

FIG. 84



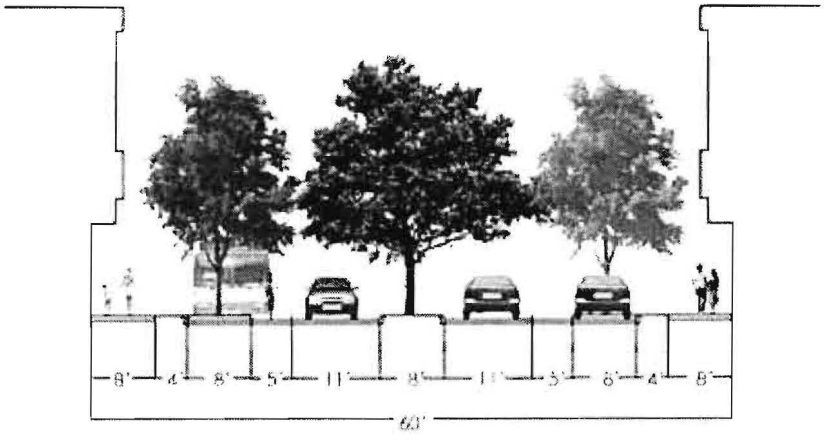
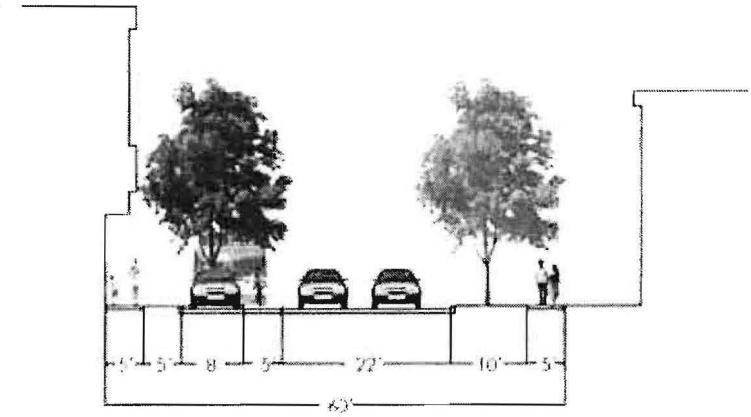
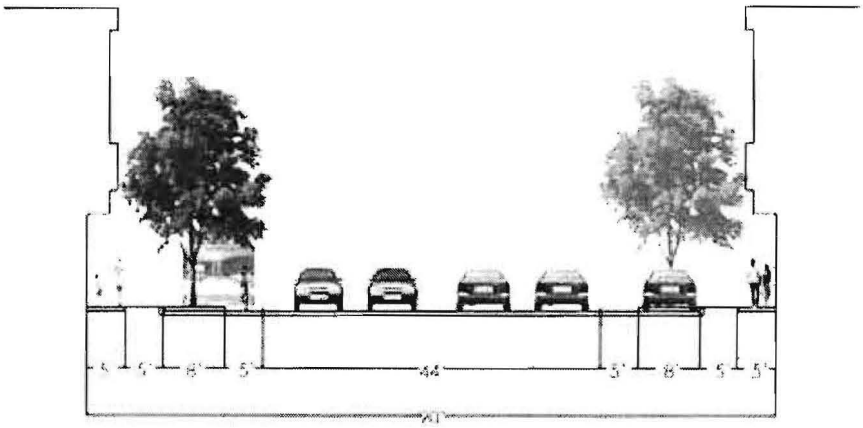


FIG. 85



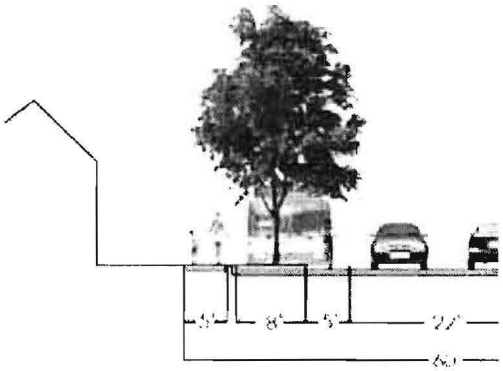


ALL SECTIONS
DRAWN AT 1"=20',
SCALED TO FIT

STREET CROSS SECTIONS

Multi-modal urban link corridor- Clifton, Riverside, and Harding Streets

N. Clifton and Harding Streets provide smaller scale connections through the neighborhood, connecting local -streets and various sub districts to each other. On-street parking and curb cuts are encouraged as well pedestrian activity zones. Separation zones are important and may be utilized for transit stops, street trees, furnishing, etc.



City-Beautiful Boulevard and Esplanades- Burdsal Parkway, 23rd, Edgemont, 25th, 26th, Roache Streets

Design by George Kessler, Burdsal Parkway serves as a major historical and cultural landmark for the United Northwest Area Neighborhood. Designated as part of the Indianapolis Historic Park and Boulevard system, these boulevards and esplanades are to be maintained and conserved. The tree lawn is to be restored to the original two rows of Elm trees and the esplanades are to be planted with ornamental trees and shrubs.